

ColorQuick Clarios Training and User's Guide

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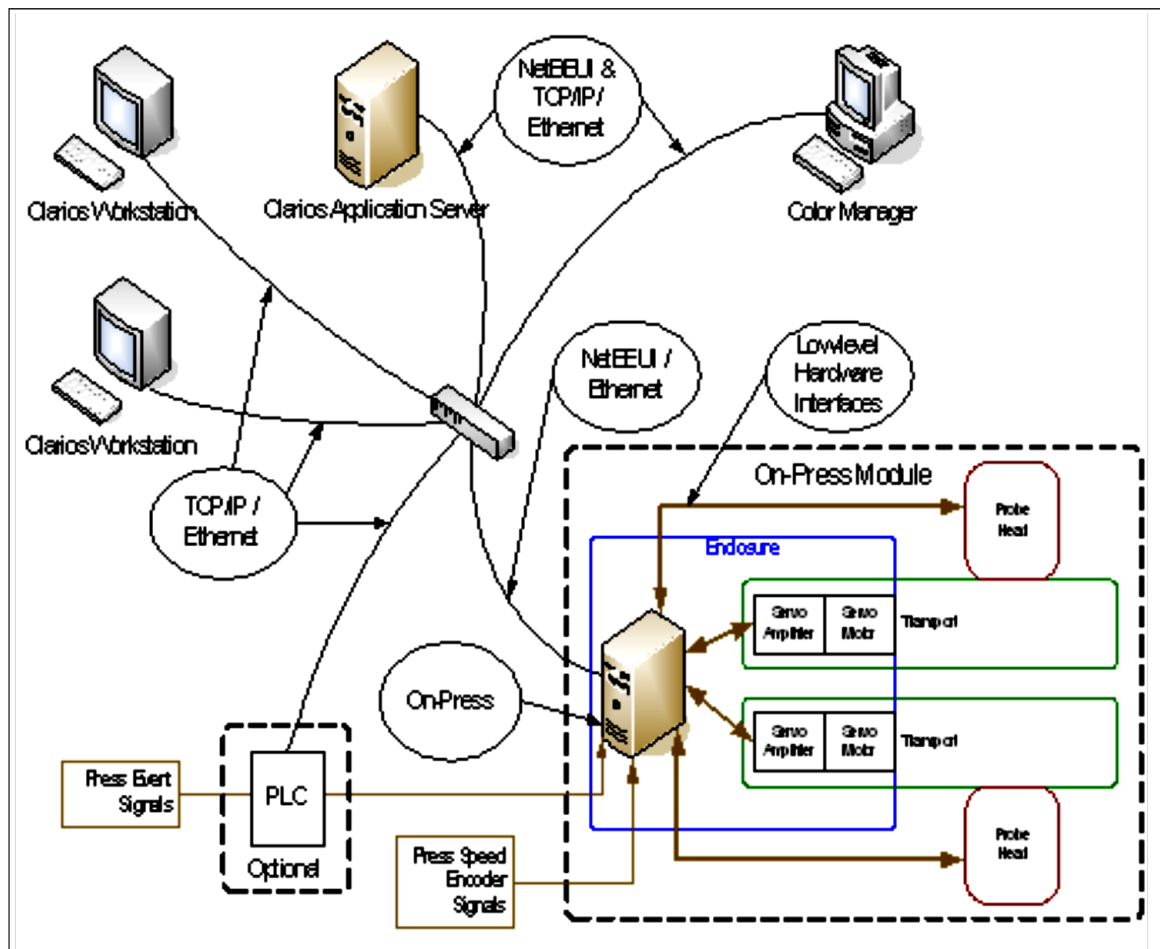
1 Introduction to Clarios

This training and user's guide teaches press operators how to use the basic features of Advanced Vision Technology's Clarios on-web, color measurement system.

See the *Clarios Advanced User's Manual* for information on additional Clarios functions and features.

All job data is created by the operator (with the aid of CIP3 presetting, if enabled) and sent to the Clarios server application. The server application captures the data and then sends it to the Clarios workstation computer. When the workstation computer receives the data, it parses it and displays the web path and form information on the Clarios workstation monitor.

1.1 Overview of Clarios System in Closed Loop

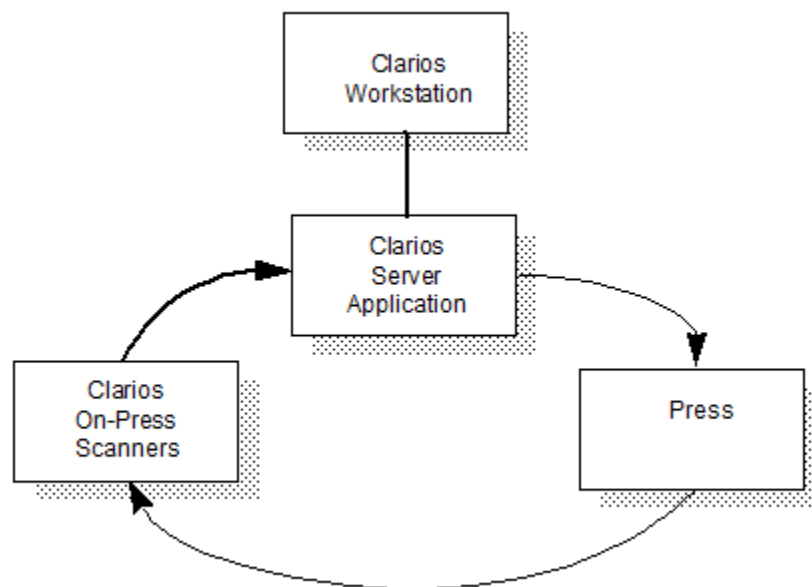


The Clarios system operates in this way:

1. The Clarios On-Press scanners measure density of points in the AVT color bar for each surface running on the press. The measurements are sent from the Clarios On-Press computer to the Clarios system.

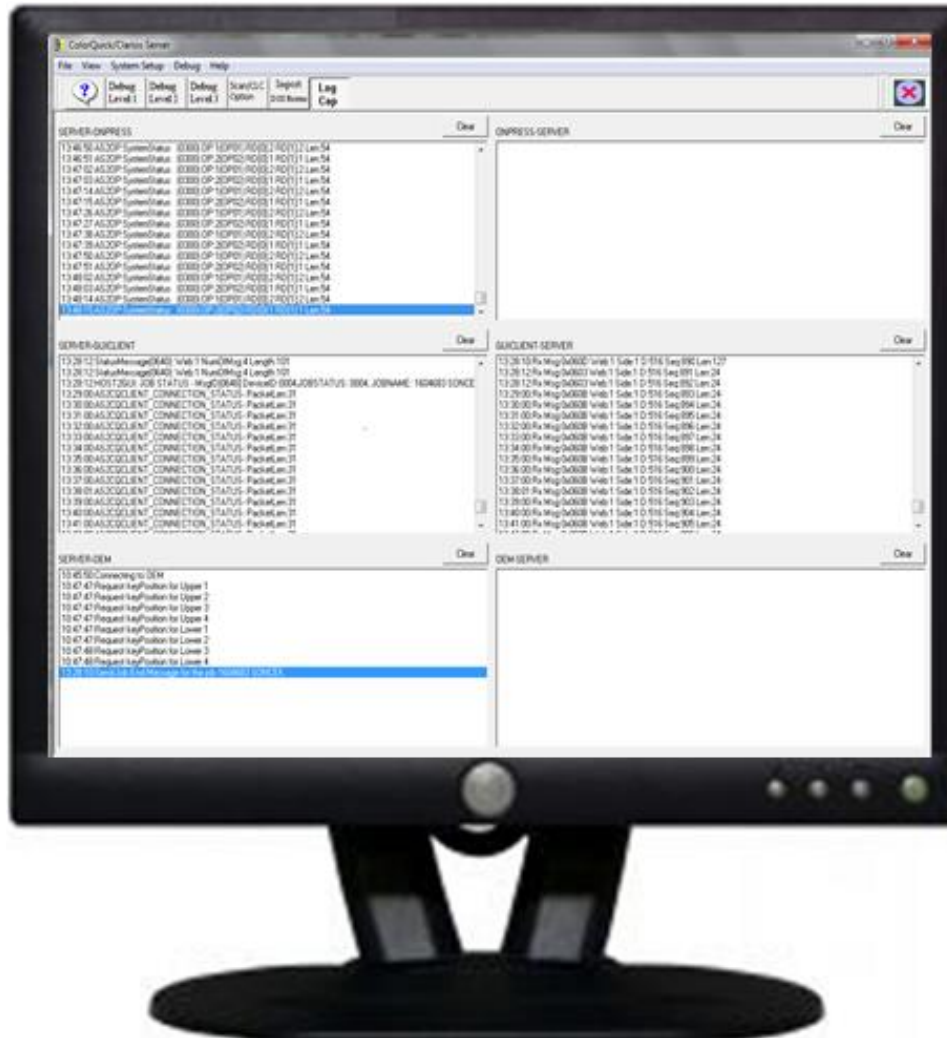
(The Clarios system includes a server application and one or more workstations. The *Clarios Service Manual* provides more information.)

2. The Clarios system compares the density readings to the target densities. The results appear on the Clarios workstation monitor.
3. Clarios sends key changes to the press console to bring color to the targets.
4. After the press has had a chance to settle with the new ink levels, the On-Press scanners begin the process again to scan the AVT color bar.



1.1.1 Clarios Server Application

The Clarios server application typically is running in the background (out of the operator's normal view). The server application supports communication to the On-Press module(s), PLC(s), key console(s), and workstation(s).



The Clarios server application provides writable form data that includes:

- form description and sampling rule
- color bar location and type
- paper type
- tolerance rule for each ink fountain
- ink type assignment, ink manufacturer for each fountain, and other ink related information

1.1.2 Clarios Workstation Application

The Clarios workstation application can be on a standalone computer or a shared computer that is also used for the Clarios server application.

Note: If shared, minimize or stop the workstation application to view the server application.

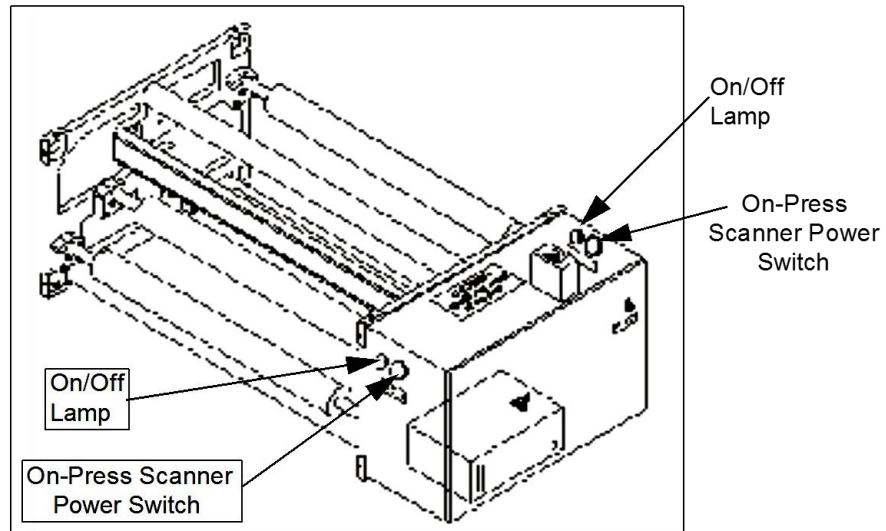


The touch-screen monitor can be cleaned with glass cleaner.

1.1.3 On-Press Scanner

The On-Press scanner reads the ink density of swatches in the AVT color bar that prints on each form and is in the web path.

- Consists of scan heads and press event boards.
- Performs ink density and spectral measurements.
- Indicates “ON” by lights on sides of Nema enclosure. (If lights are not on, check the yellow power buttons or safety switch on the enclosure door.)



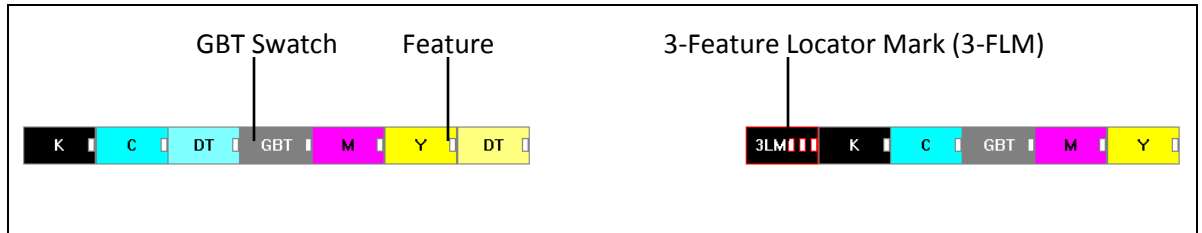
1.2 Glossary of Basic Clarios Terms

Clarios server application	Central communication point for all Clarios subsystems, including On-Press, console, programmable logic controller (PLC), and workstation.
Clarios workstation computer	Composed of all Clarios sub-systems, including server application, workstation computer, On-Press, press console, and Color Manager.
Color Manager	Generates charts and reports based on Clarios scan data and is the remote storage area for Clarios forms.
On-Press	Module that controls one or two probe heads and electrical interface to press outputs (i.e. speed, splice, and wash signals).
Press console	Typically an OEM ink desk, AVT Microcolor product (Mercury or Microcolor II).

1.3 AVT Color Bar

The AVT color bar has small, specially-shaped swatches to evaluate density. A GBT swatch is in every key of a FFMR color bar.

The following figure shows a sample FFMR color bar.



Clarios uses a spectrophotometer to measure and control color.

Spectrophotometer: An instrument for measuring and comparing the intensities of the colors of the spectrum.

A densitometer measures how much light is absorbed by the ink and substrate combination. Density is relative to the thickness of the ink film.

Clarios compares the measurement to a standard value (target density).

- Shop standard target densities are:

K: _____ C: _____ M: _____ Y: _____

- SWOP (Specifications for Web Offset Printing) standards are:

K: 1.60 C: 1.30 M: 1.40 Y: 1.00

2 Launching Clarios & Navigating Clarios Views

This section explains how you launch the Clarios system, use the main toolbar, and navigate between views on the Clarios workstation monitor.

2.1 Launch Clarios System

1. Power on the On-Press module. (See the *Clarios Advanced User's Manual* for information on the On-Press).
2. Power on the press console. (See the OEM or GMI *Operator Console Unit (OCU3) User's Manual* for more information.)
3. Turn on the Clarios workstation computer. The Clarios server and workstation applications will start automatically.

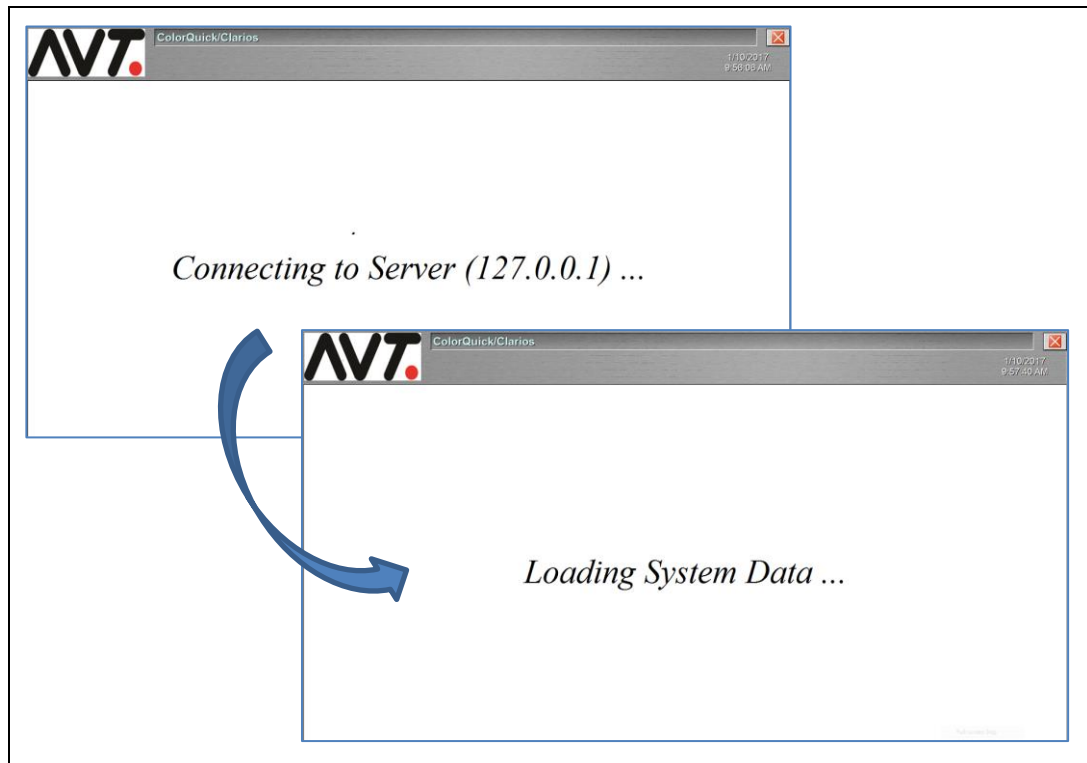


If the server application does not start, double-touch the **Clarios AppServer** icon to start the server.



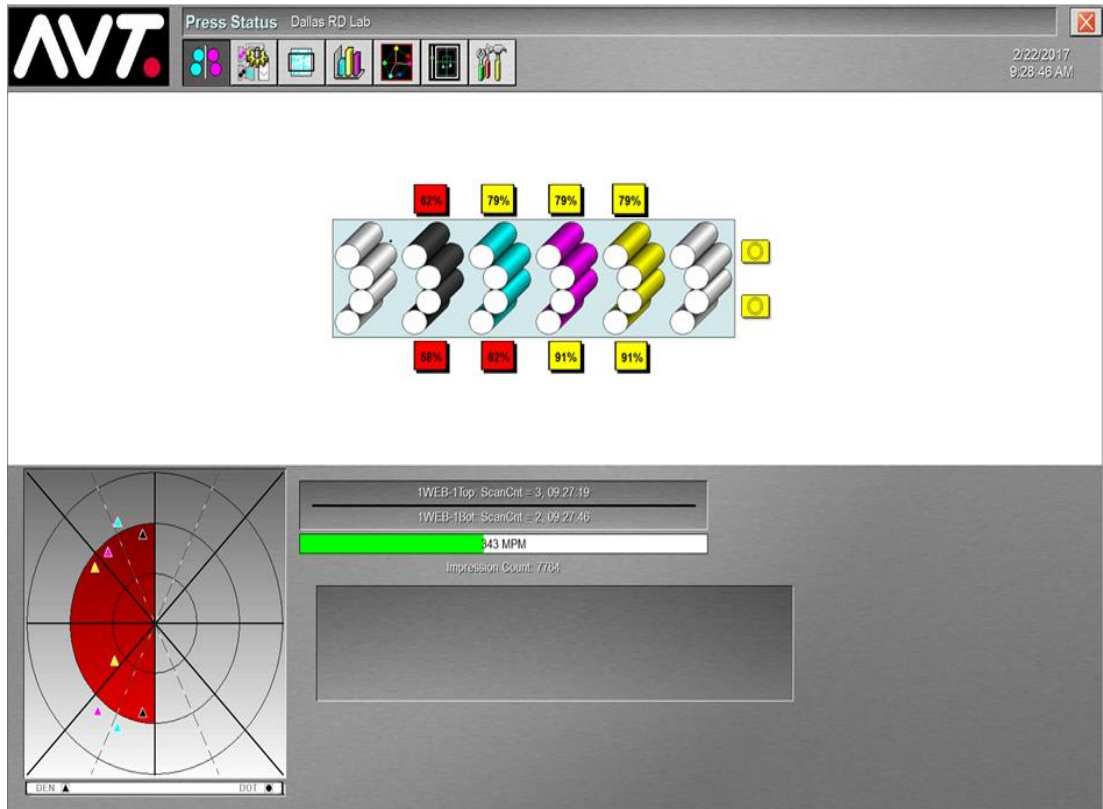
If the workstation application does not start, double-touch the **Clarios Client** icon to start the client.

4. While loading, the “Connecting to Server” and “Loading System Data” messages display on the Clarios workstation computer.



These messages should clear in 30-60 seconds.

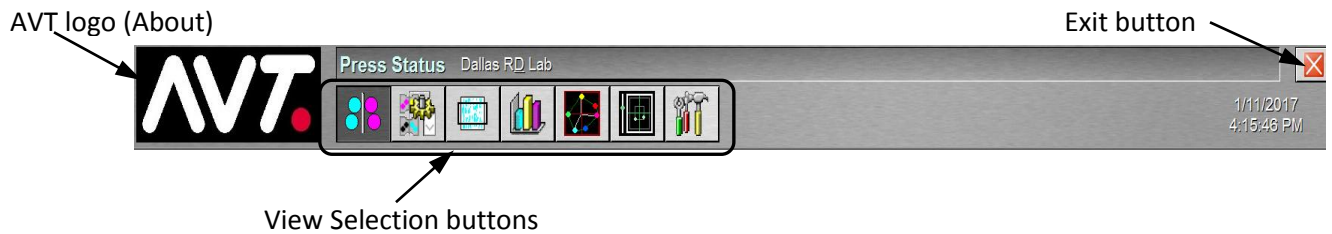
- After the system and job data have been received, the Press Status view should display with the press units and camera icons on the Clarios workstation computer.



See the “Troubleshooting” section of the *Clarios Advanced User’s Manual* if the workstation application does not connect or the camera icons are red.

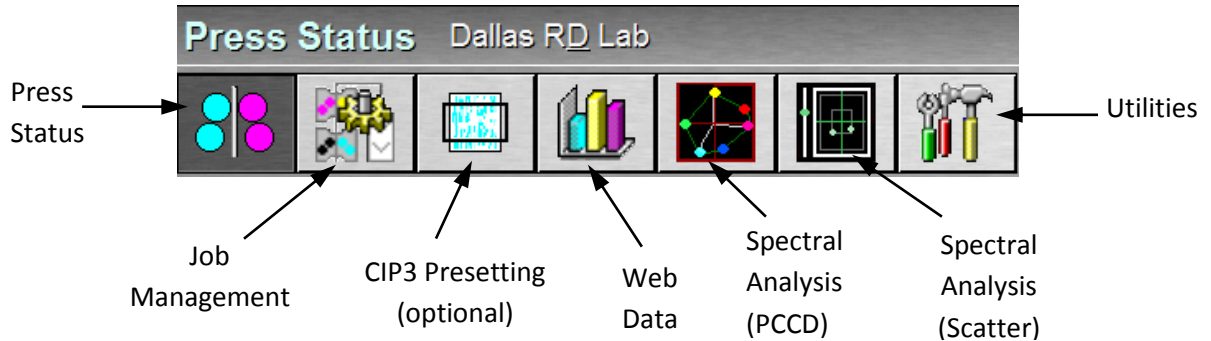
2.2 Use Main Toolbar

The main toolbar has operational buttons for navigating through the Clarios system.



2.2.1 View Selection Buttons

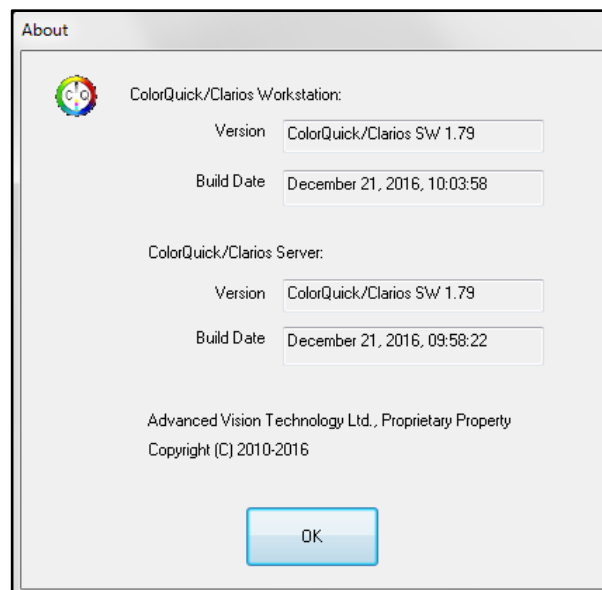
The View Selection buttons let you switch between the **Press Status**, **Job Management**, **Web Data**, **CIP3 Presetting**, **Spectral Analysis (PCCD)**, **Spectral Analysis (Scatter)**, and **Utilities** views.



2.2.2 AVT Logo (About) Button



Touch the **AVT logo** to view system parameters on the About screen.



The About screen displays the software version and copyright information. This information will be helpful during telephone support.

Touch the **OK** button to exit the About screen.

2.2.3 Exit Button



Touch the **Exit** button to exit the Clarios system. This takes you to the normal Windows computer view.



To launch the Clarios system again, touch the **Clarios Client** button.

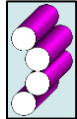



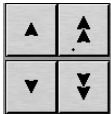

2.3 Use Touch-Screen Buttons, Icons, and Keypads

This section provides an overview of the touch-screen buttons, icons, and keypads used on the Clarios workstation monitor.

2.3.1 Using Touch-Screen Buttons and Icons

All Clarios system interactions are performed by touching either buttons or icons on the Clarios workstation monitor.

Following are a few examples of icons and buttons.

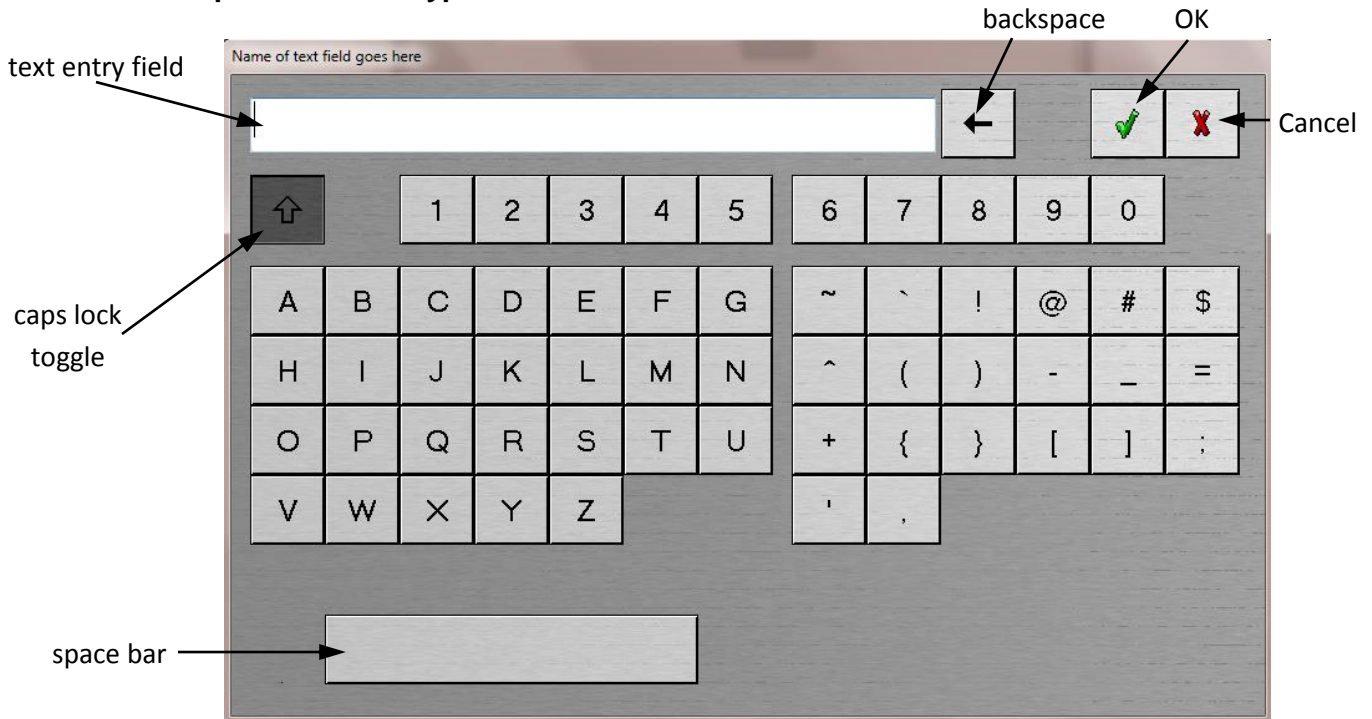
	<p>Press Inker Unit icon</p> <p>Touch on Press Status view to go to Web Data view to monitor scan data results.</p>
	<p>Details icon</p> <p>Touch on Ink Tab of Job Management view to display dialogs where you can change various form values.</p>
	<p>Confirm/Apply button</p> <p>Touch to affect or apply a change.</p>
	<p>Target change button</p> <p>Touch on Web Data view (Key Values mode) to specify a target value for adjusting ink.</p>
	<p>Increase/Decrease target values buttons</p> <p>Touch on Web Data View to increase or decrease ink to the target value.</p>
	<p>Cancel/Undo button</p> <p>Touch to undo or cancel any recent change.</p>

2.3.2 Using Keypads to Enter Information

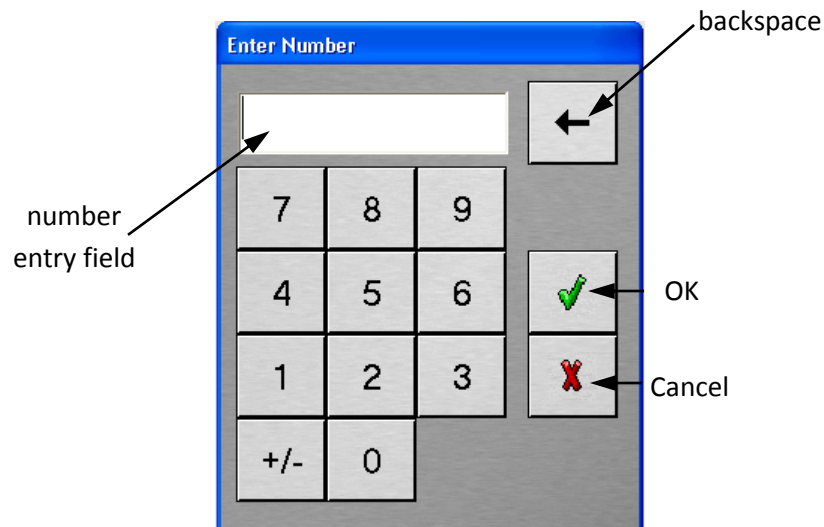
You can enter information on the Clarios workstation monitor using an alphanumeric or numeric keypad.

When you touch an area on the monitor that requires you to enter information, the appropriate keypad automatically displays. Touch the appropriate letters, numbers, or symbols to enter the information and then touch **OK**.

Alphanumeric Keypad



Numeric Keypad

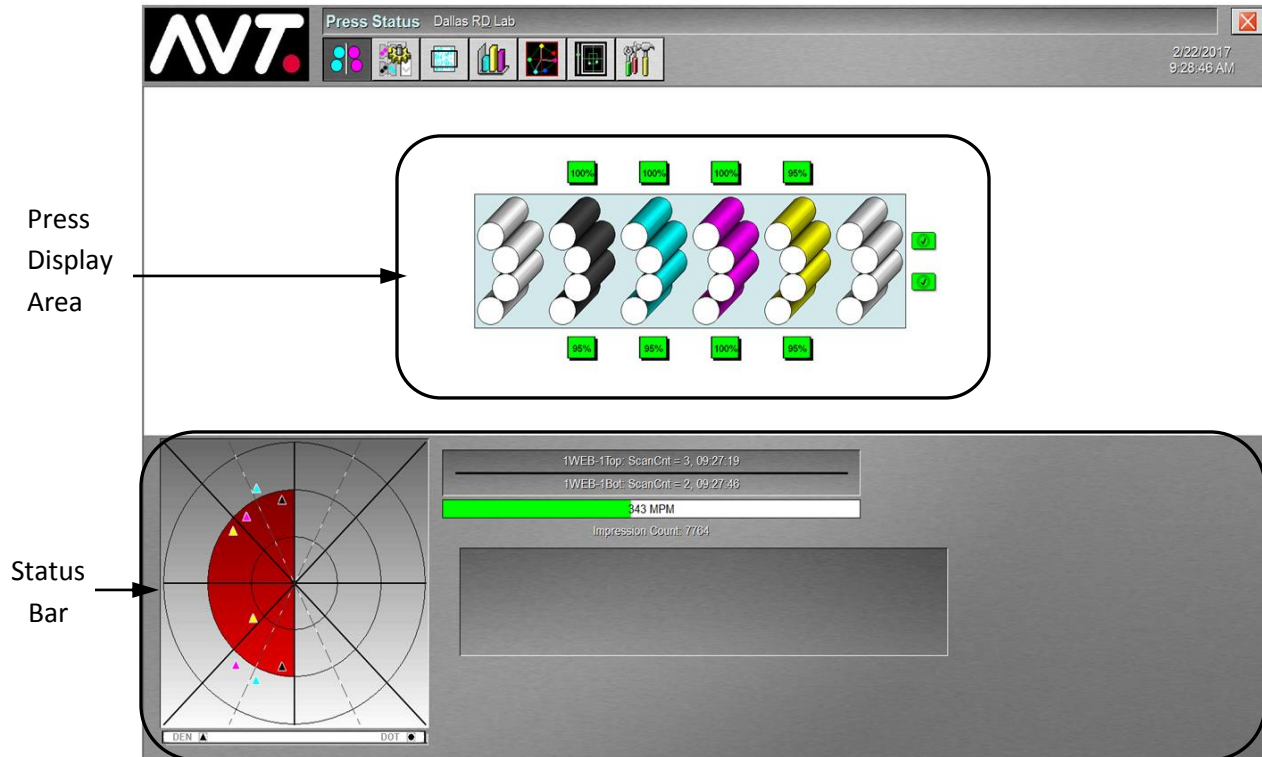


2.4 Navigate the Views

This section provides an introduction to the main Clarios views.

2.4.1 Press Status View

At the Press Status view, you can view and monitor the overall status of all active jobs on all presses.

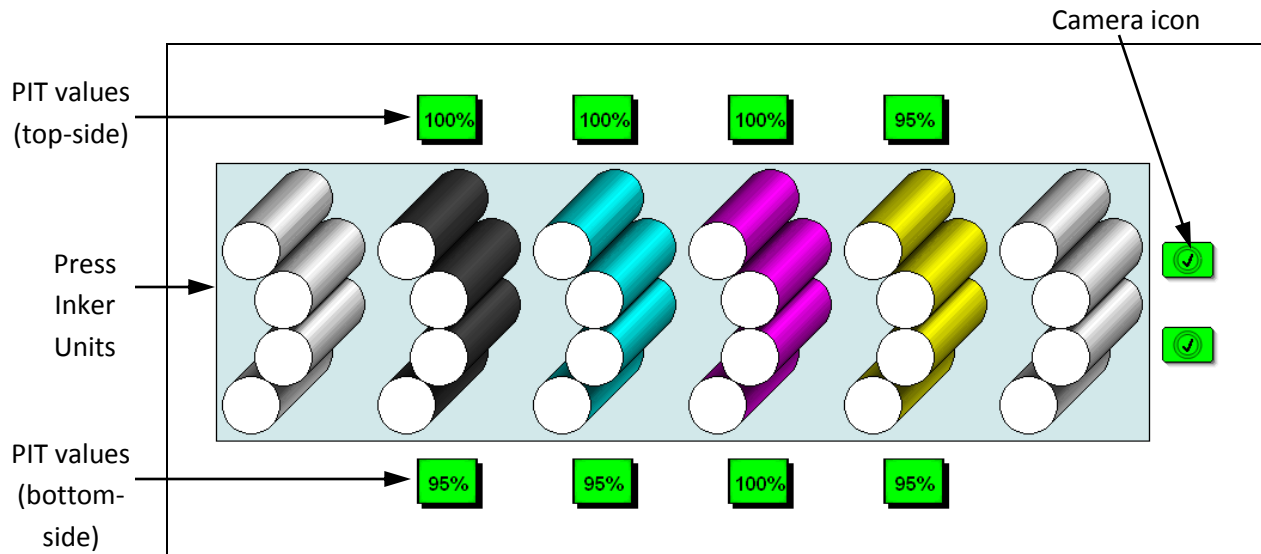


Press Display Area

In the press display area of the Press Status view, you can:

- Touch any of **press inker units** in press display area to go to Web Data view.
- Monitor **percent-in-tolerance (PIT) values** for the top-side and bottom-side of each press unit. PIT values (percentage of ink keys in tolerance) are configured during system installation.
- View scanning status of **cameras**.

Note: When the end of a press inker unit shows the color of the inker, this indicates it is in closed loop control (CLC).



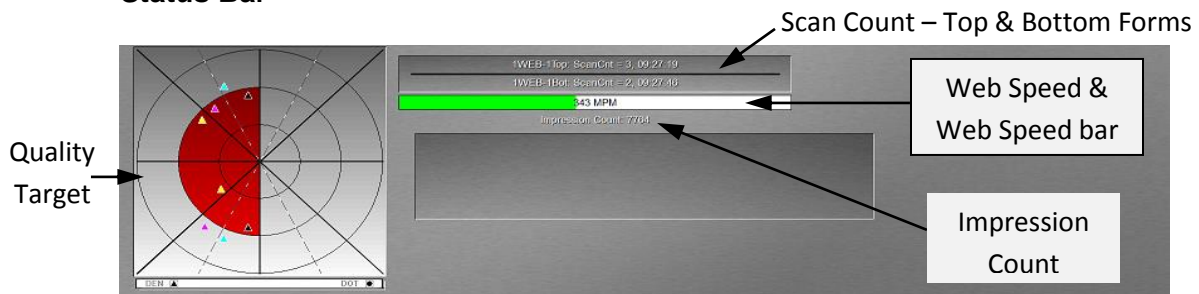
The PIT values buttons will show one of the following colors:

- green - at the high PIT value
- yellow - between the low and high PIT values
- red - below the low PIT value

The camera icons will show one of the following colors:

- green (with checkmark) - scanning in production mode
- yellow - scanning in makeready mode
- white - scanner is idle or off
- red - On-Press (OP) is offline

Status Bar



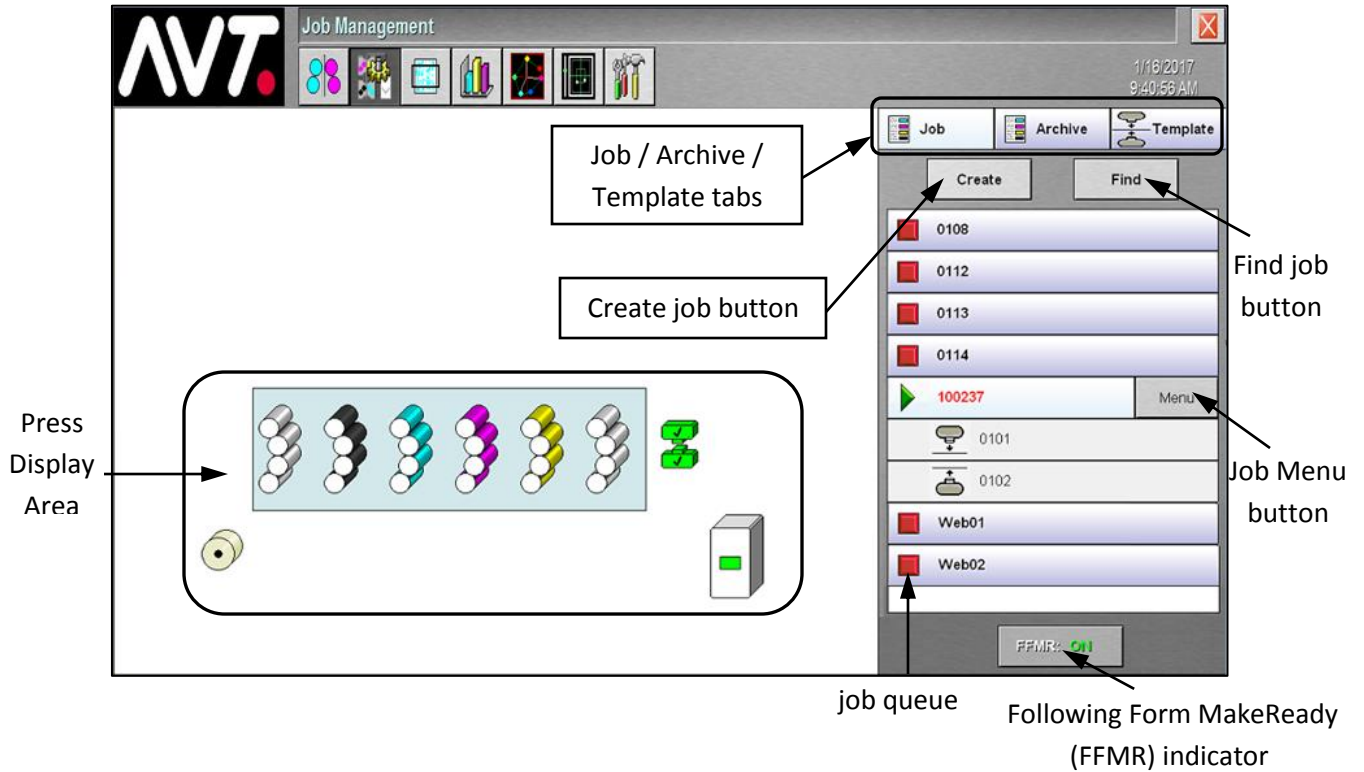
The quality target consists of:

- quality circle - quick reference display indicating overall printing quality.
- color diamonds - display for each color dot gain.
- color triangles - display for each color.

The closer the measurement is to center, the closer to target. If the surface is in sample mode, shapes will be in the inner circle and the inner circle turns green.

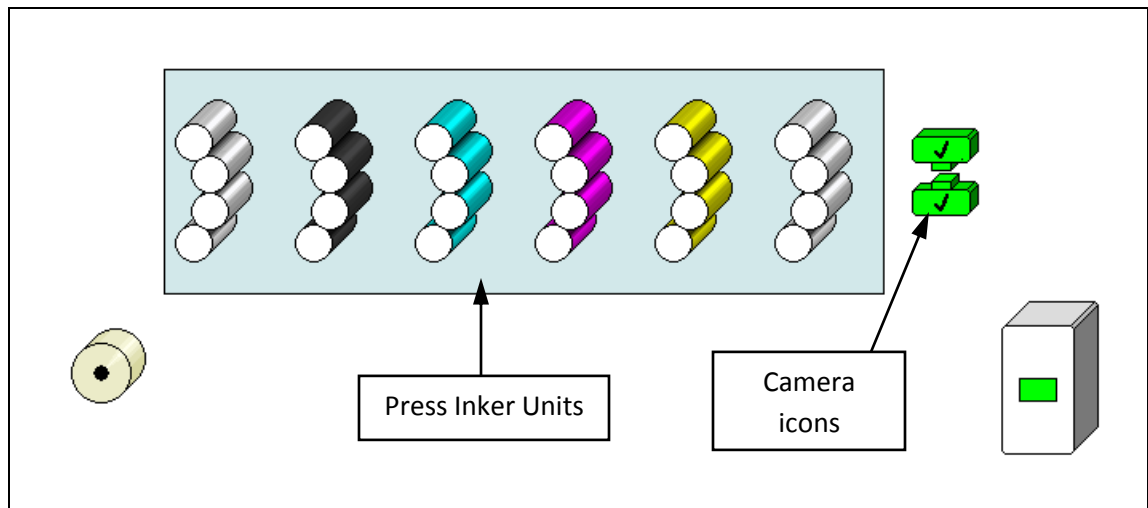
2.4.2 Job Management View

On the Job Management view, you can create a job, start/stop a job, add forms to a job, and manage forms and templates.



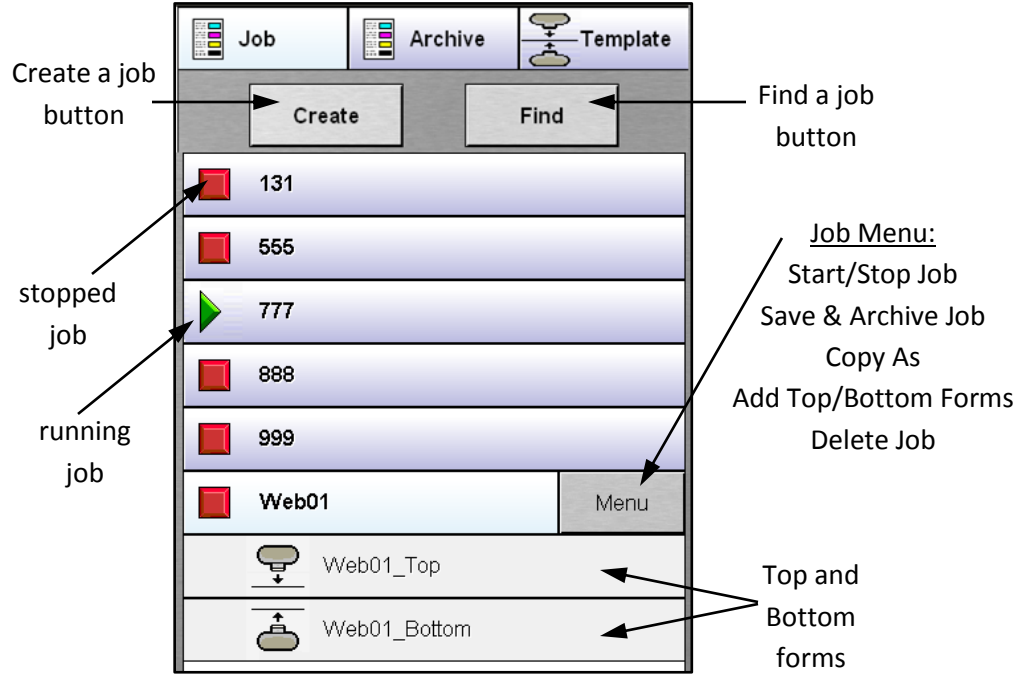
Press Display Area

In the press display area of the Job Management view you can view the status of the press inker units and cameras.



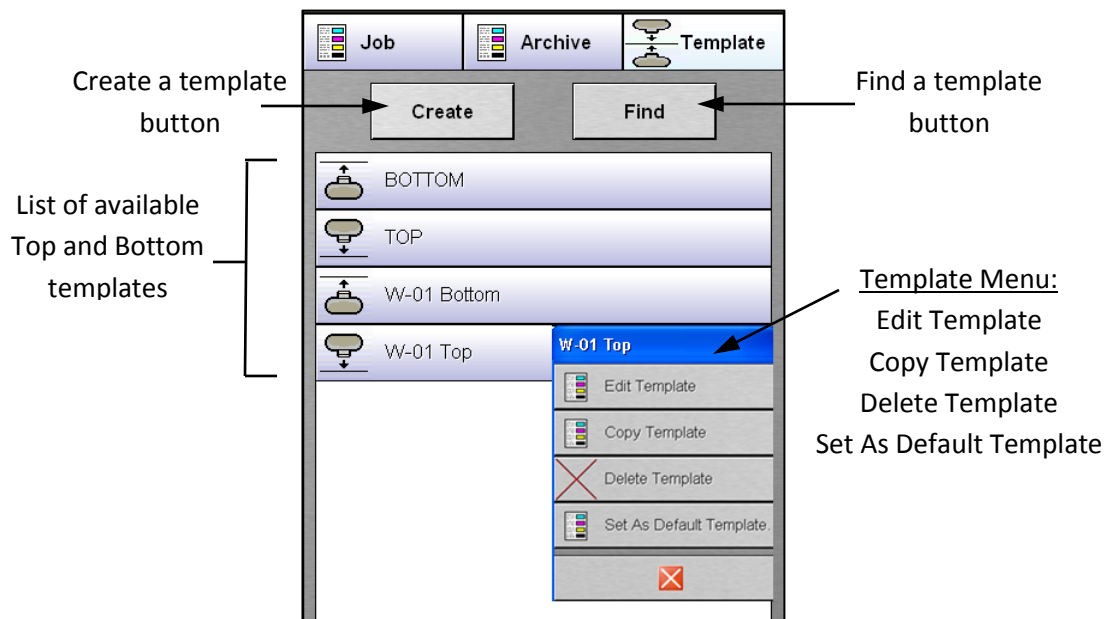
Add/Edit Jobs and Forms View

With the **Job** tab selected on the Job Management view, you can create a new job, set up forms for the job, find a job in the current job queue (up to 45 jobs), start and stop a job, save and archive a job, and make changes to forms.



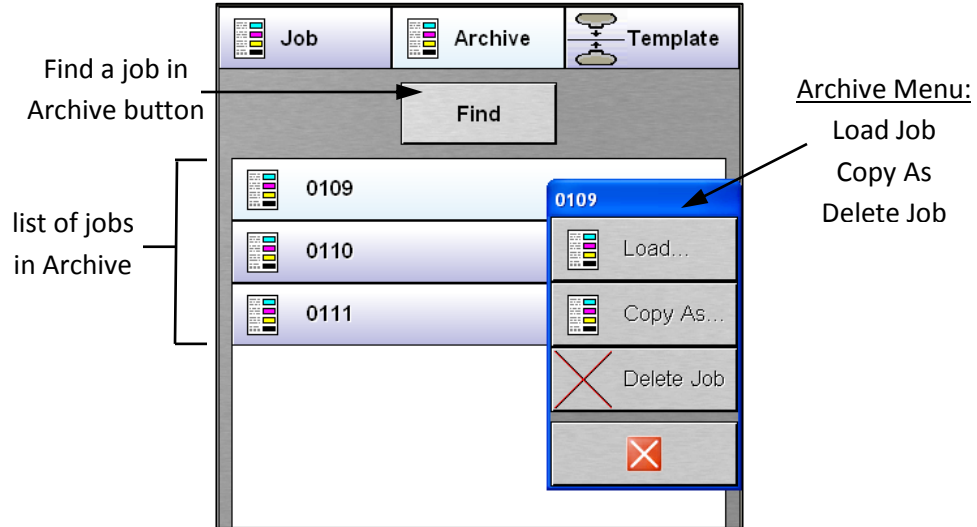
Add/Edit Templates View

With the **Template** tab selected on the Job Management view, you can create and edit top and bottom templates, find a template in the template queue, copy a template, delete a template, and set a template to be the default template.



Manage Archive View

With the **Archive** tab selected on the Job Management view, you can find a job in the archive queue, load an archived job to the active job queue, copy an archived job, and delete an archived job.



2.4.3 Web Data View

From the Web Data view, you can access four different views: **Delta Density**, **Scan Data**, **Key Position**, and **Tone Value**.

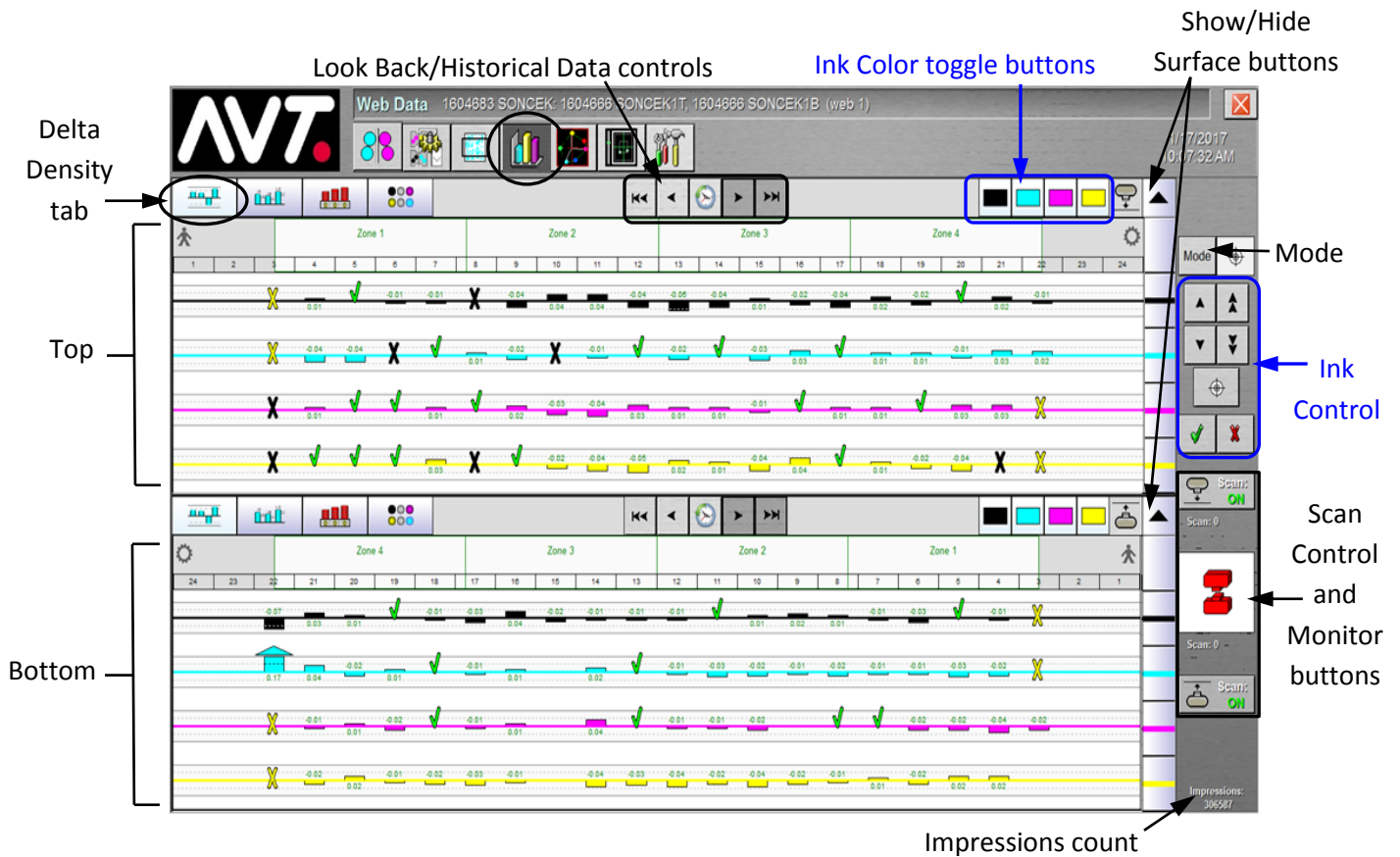
From these views you can:

- View ink density results for each ink key in graphical form.
- View the status of top and bottom surfaces.
- Switch between Delta Density, Scan Data, and Tone Value web data.
- Adjust ink key values.
- Set target density values.
- Choose the mode (Key Values or Display Switch).

Delta Density View

On the Delta Density view, you can:

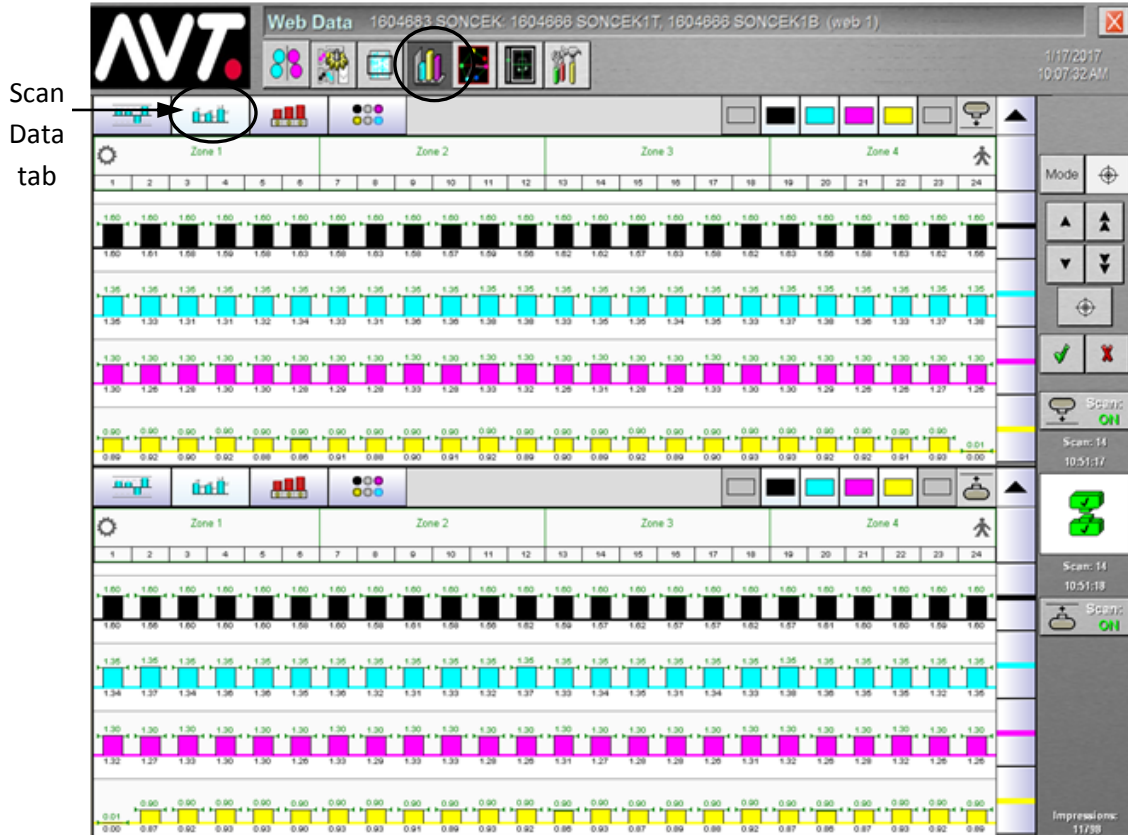
- View calculated delta density values, which are the scan data values minus the target data values of individual inkers.
- View historical values when historical scans exist.
- Show/hide surface, when more than four colors are running on a form.
- Adjust target values by ink, zone, sides, and individual keys.



Scan Data View

On the Scan Data view, you can:

- View actual scanned (not calculated density difference) values in graphical form, with target values and actual scan values displayed together.
- Adjust target values by ink, zone, sides, and individual keys.

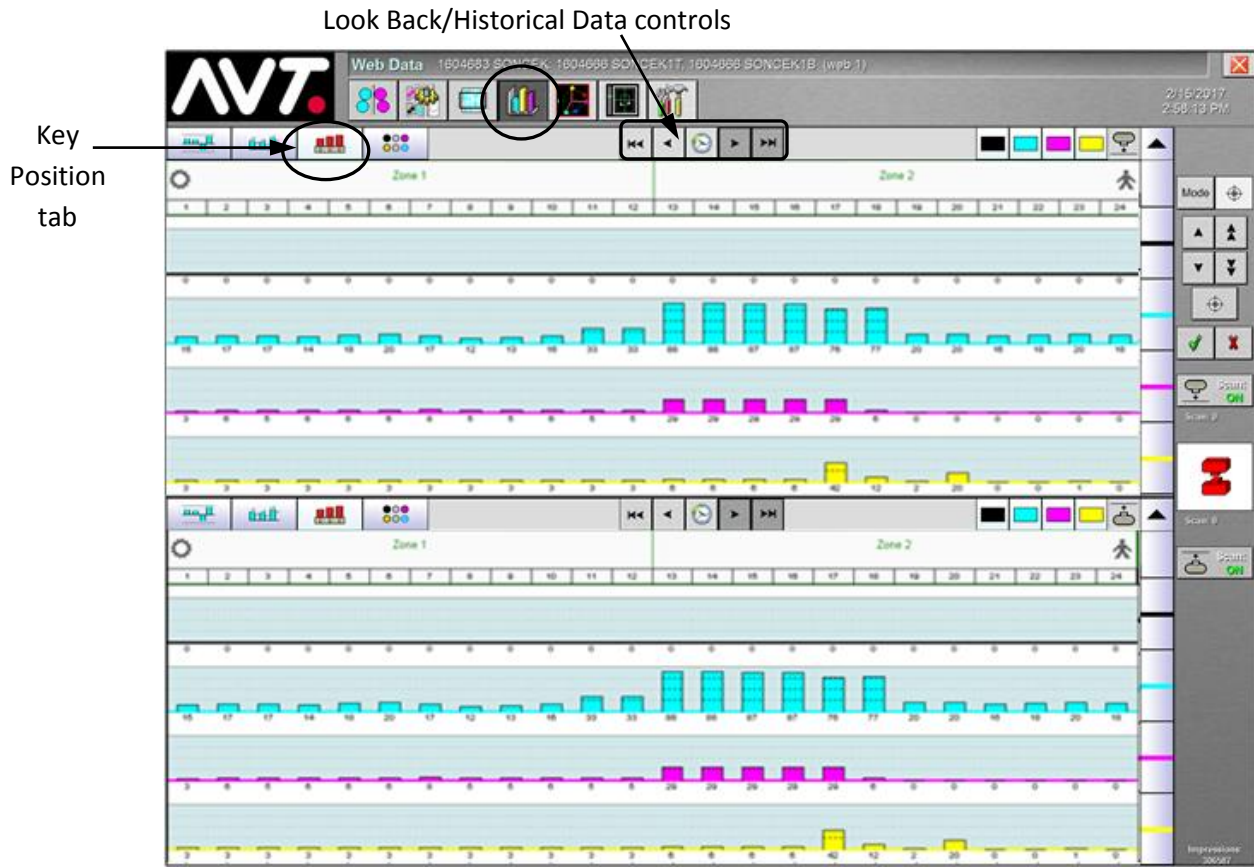


Note: You can use all of the same buttons described under the Delta Density view for the Scan Data view.

Key Position View

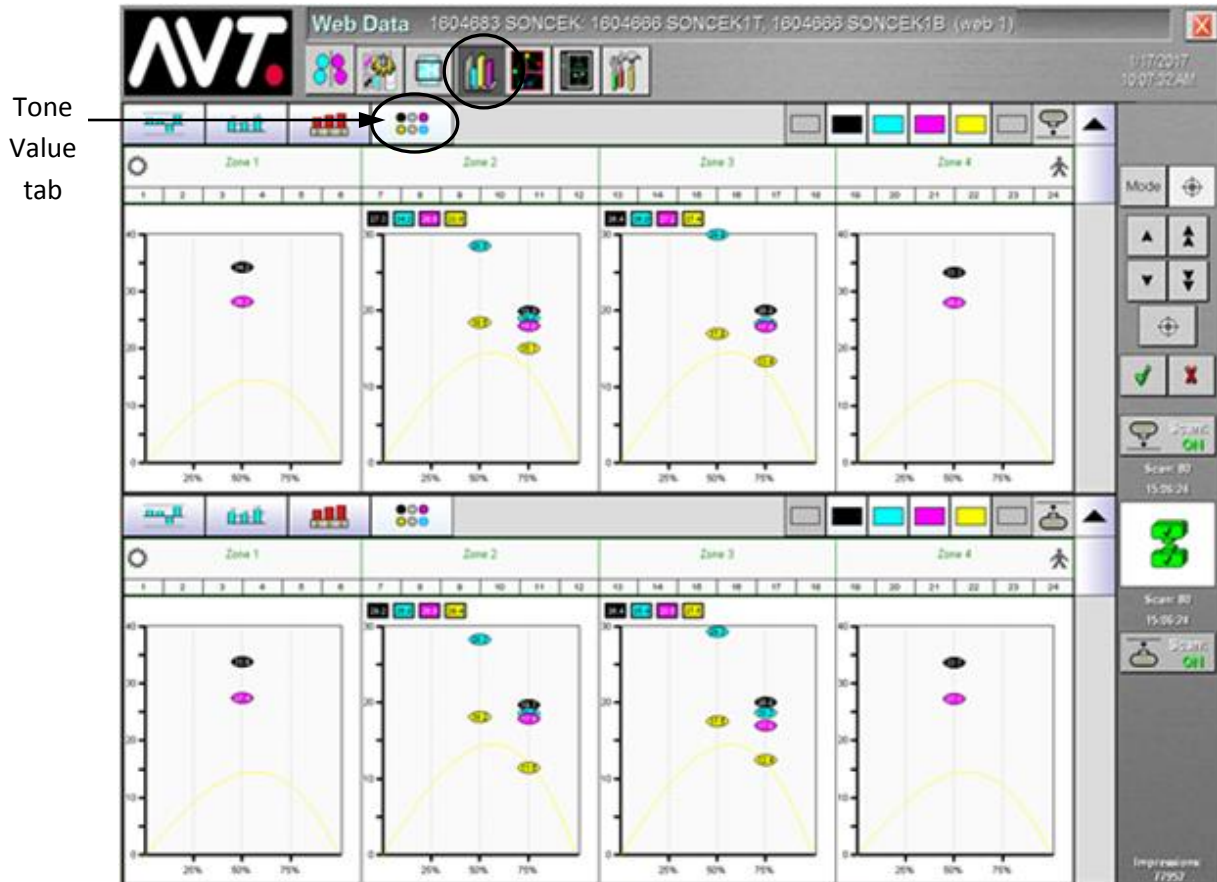
On the Key Position view, you can:

- View and adjust the actual key values on the press.
- View historical values when historical scans exist.



Tone Value View

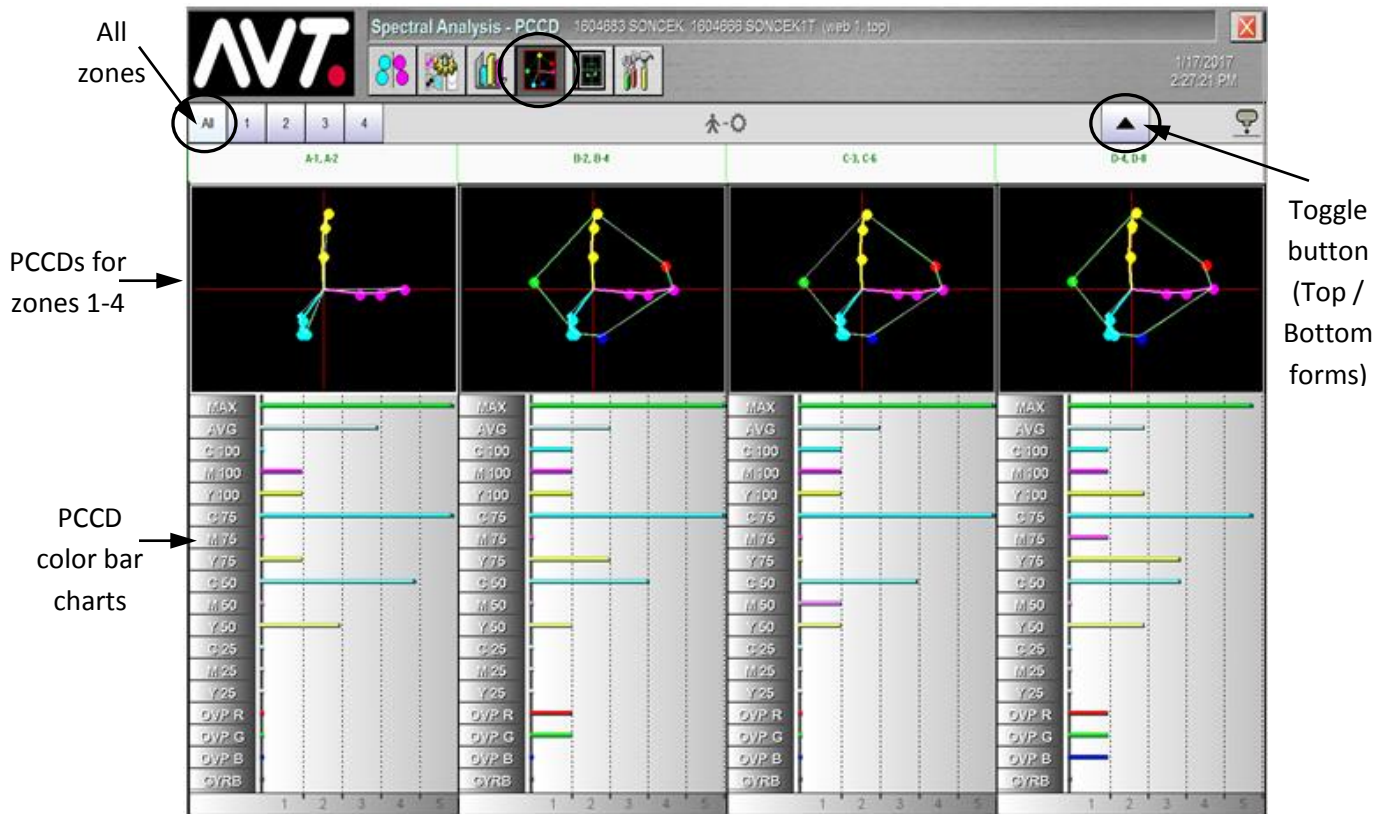
On the Tone Value view, you can view tone value increase (TVI) distribution (dot gain).



2.4.4 Spectral Analysis – PCCD View

From the Spectral Analysis – PCCD view you can view Process Color Conformance Diagrams (PCCD) and PCCD color bar charts for all reporting zones.

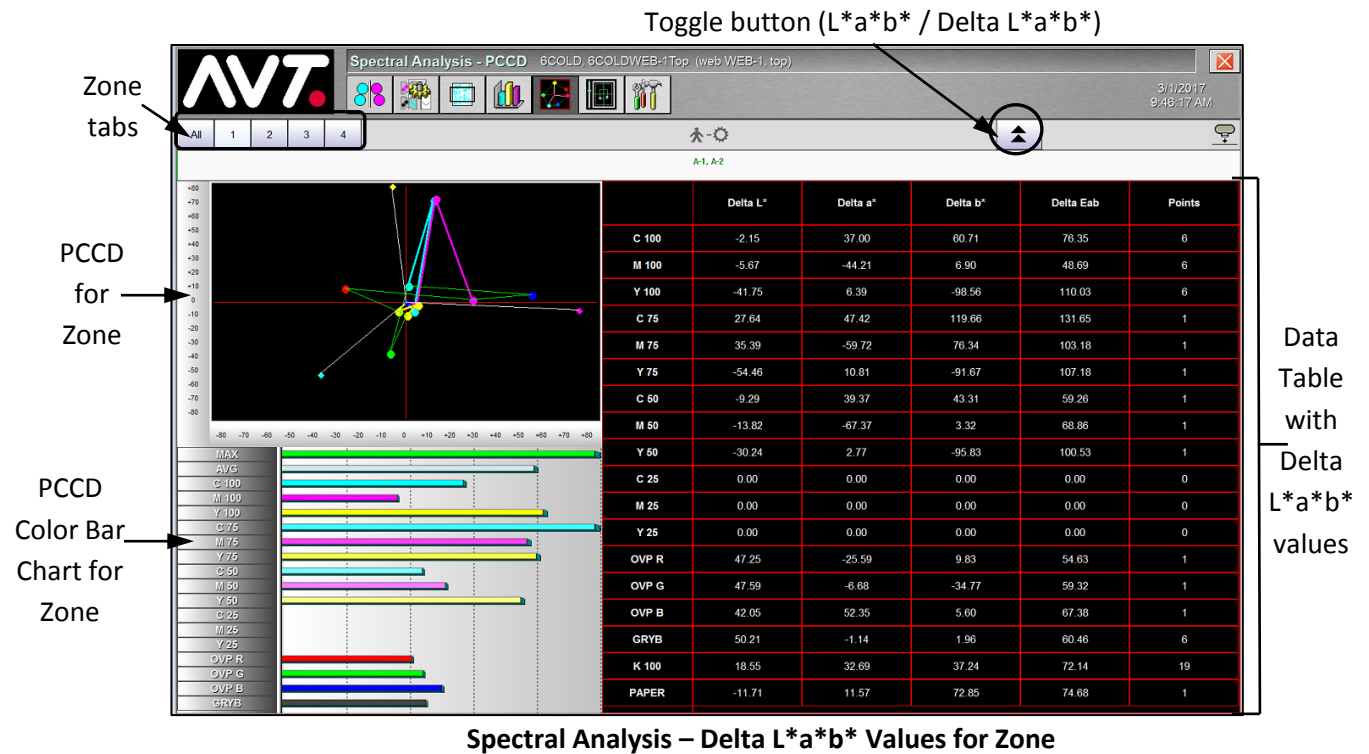
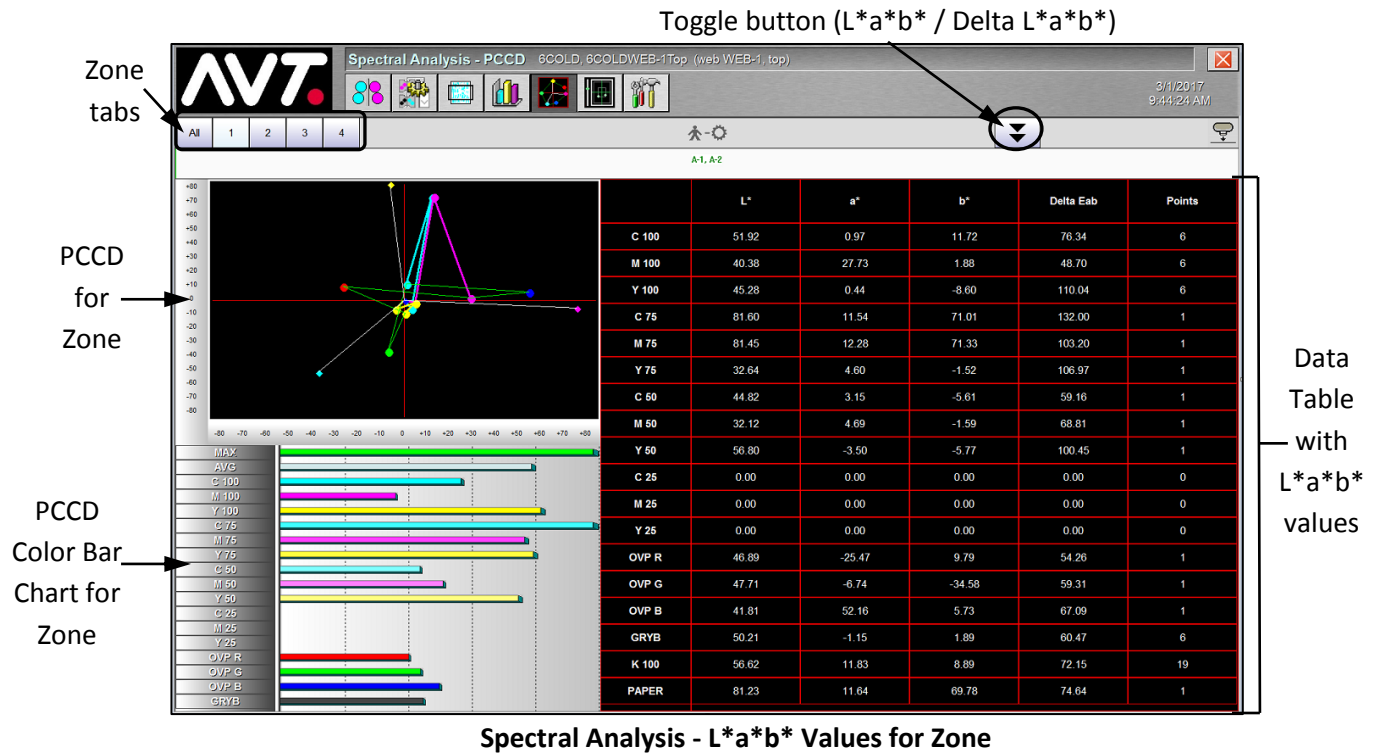
See the *Clarios Advanced User's Manual* for more detailed information.



The PCCD is a quick way to determine whether the color ($L^*a^*b^*$) of the color bar targets for solids or for tints have shifted from their target values. The most saturated (solid) results from the last scan are connected with a green line. (The expected results for the most saturated colors are connected with a white line.) When the most recent measured values are nearly the same as the targets, these lines can overlap.

The color difference (Delta E) for each type of color bar target is graphed in the color bar charts section of the screen.

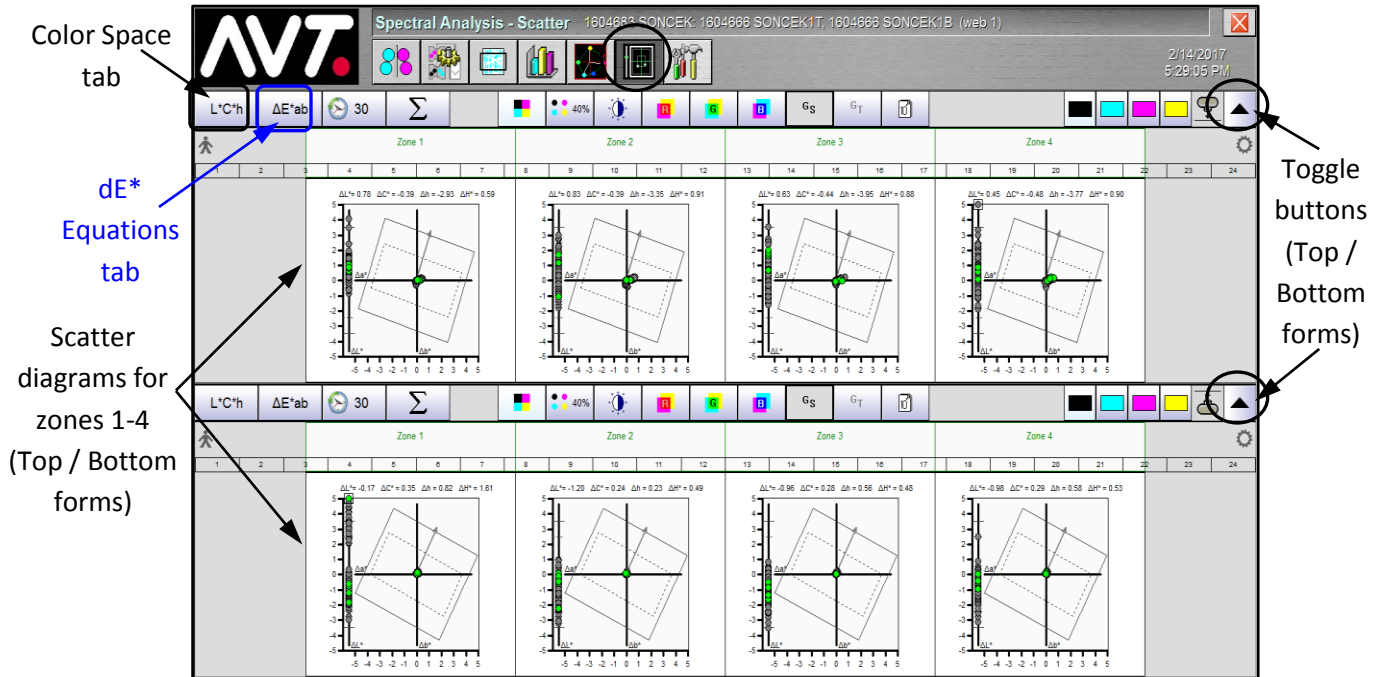
You can also zoom in to view the target colorimetric values ($L^*a^*b^*$) values and colorimetric differences values (Delta L^* , Delta a^* , Delta b^*) for a selected zone. The following figures show examples of $L^*a^*b^*$ values and the Delta L^* , Delta a^* , Delta b^* values for a selected zone.



2.4.5 Spectral Analysis – Scatter View

From the Spectral Analysis – Scatter view, you can view colorimetric data by color space for a single unit, by reporting zone.

See the *Clarios Advanced User's Manual* for more detailed information.

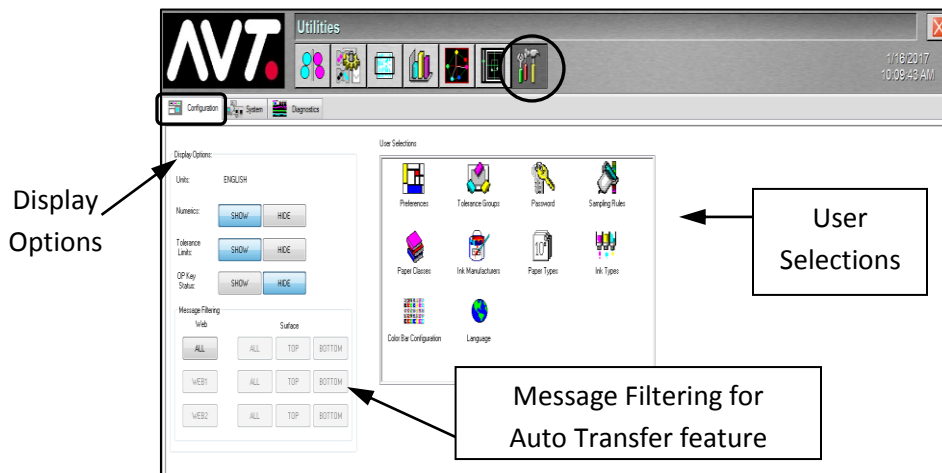


2.4.6 Utilities View

From the Utilities view, you can access configuration, system, and diagnostic controls.

Configuration

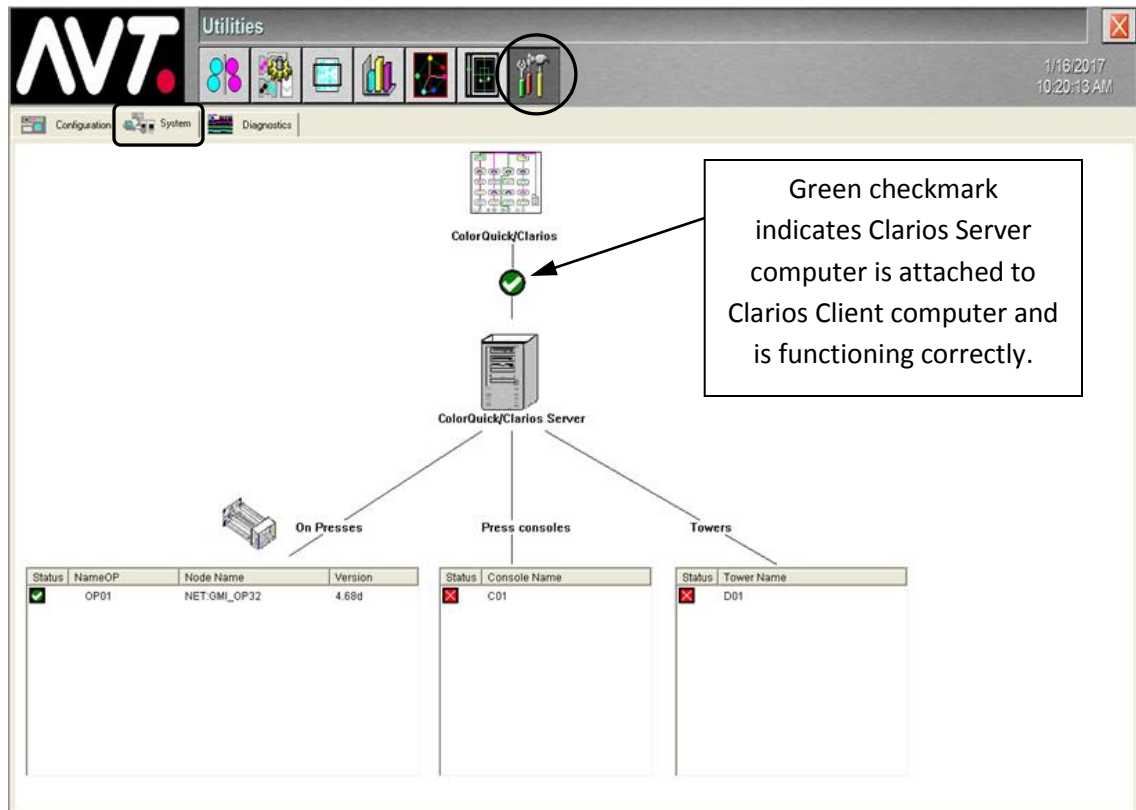
On the **Utilities - Configuration** view, you can specify various display options and specifications that are used to customize the system.



- **Display Options**
Control how views present data.
- **User Selections**
Configure Clarios libraries with default settings

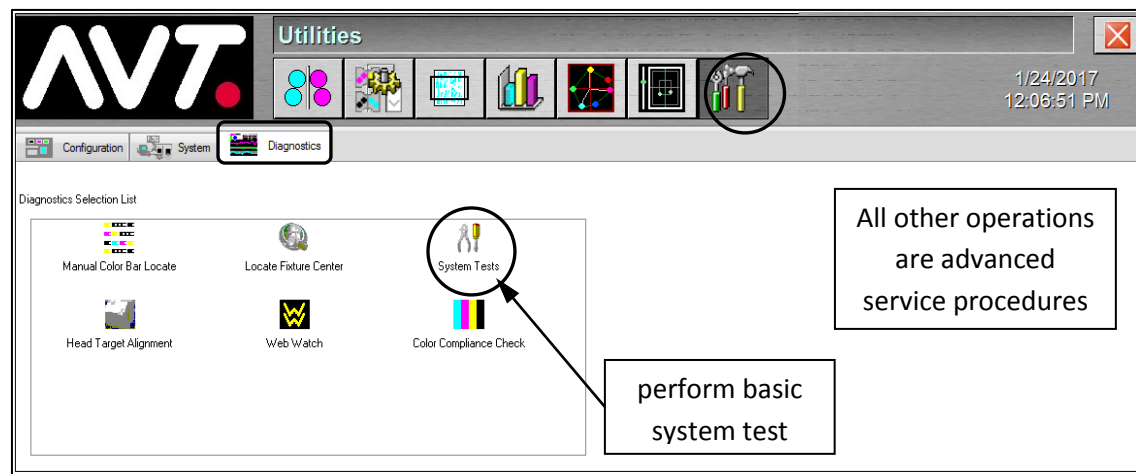
System

On the **Utilities - System** view, you can see an overview of the system configuration.



Diagnostics

On the **Utilities - Diagnostics** view, you can perform a basic system test.



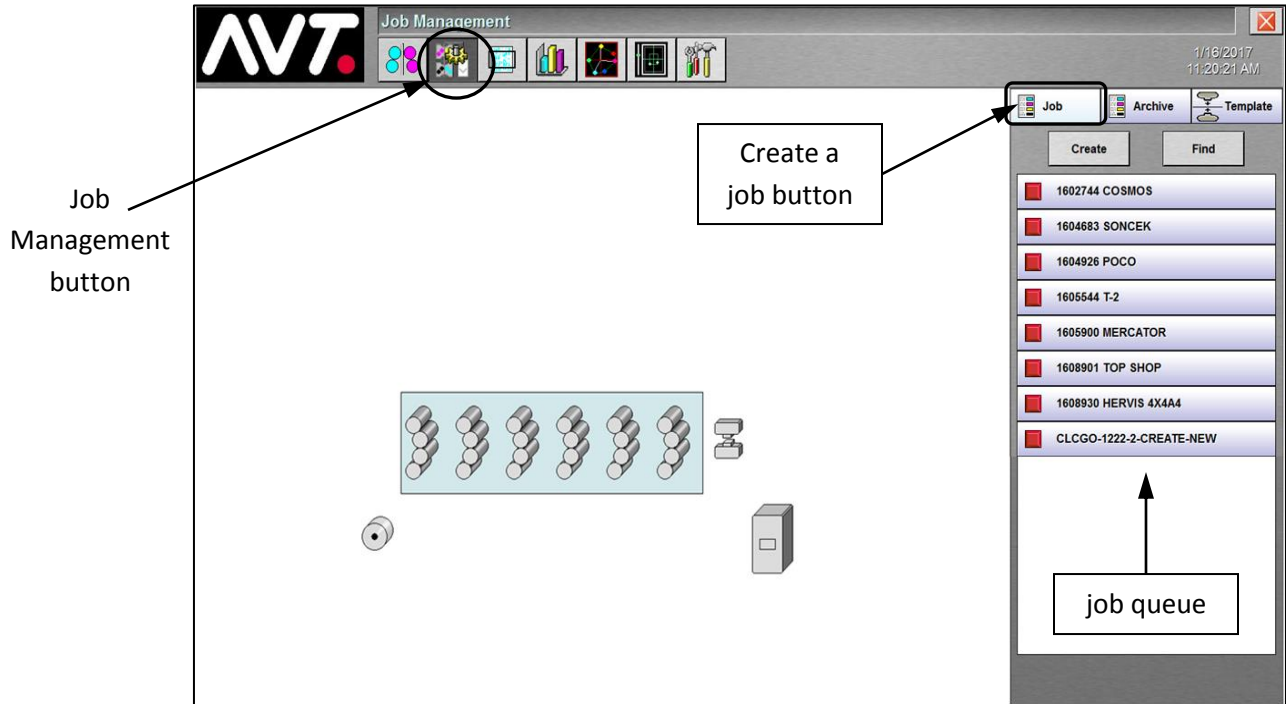
See [Perform a Basic System Test](#) for more detailed information on performing a system test and the *Clarios Service Manual* for more information on diagnostics.

3 Creating a Job and Setting Up Forms

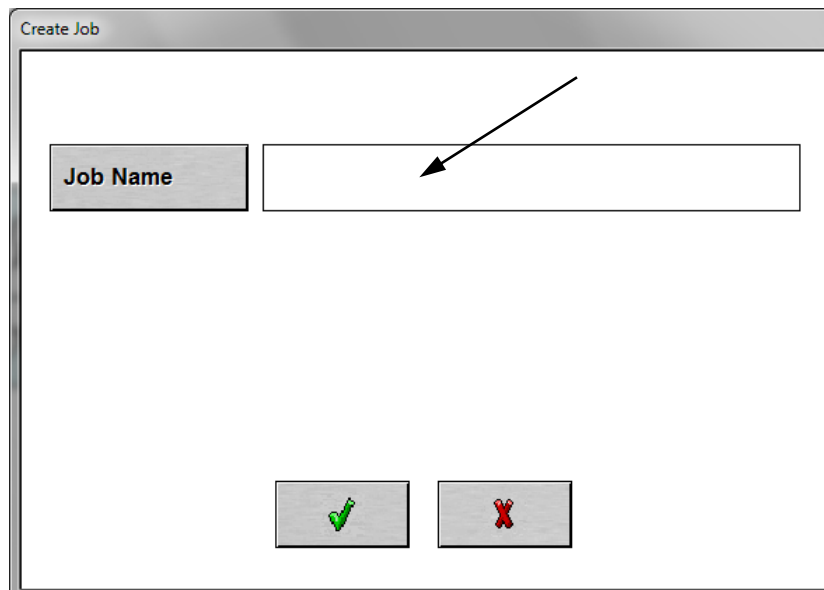
This section introduces the basic elements of using Clarios to create a job and set up forms.

3.1 Create a New Job on the Job Management View

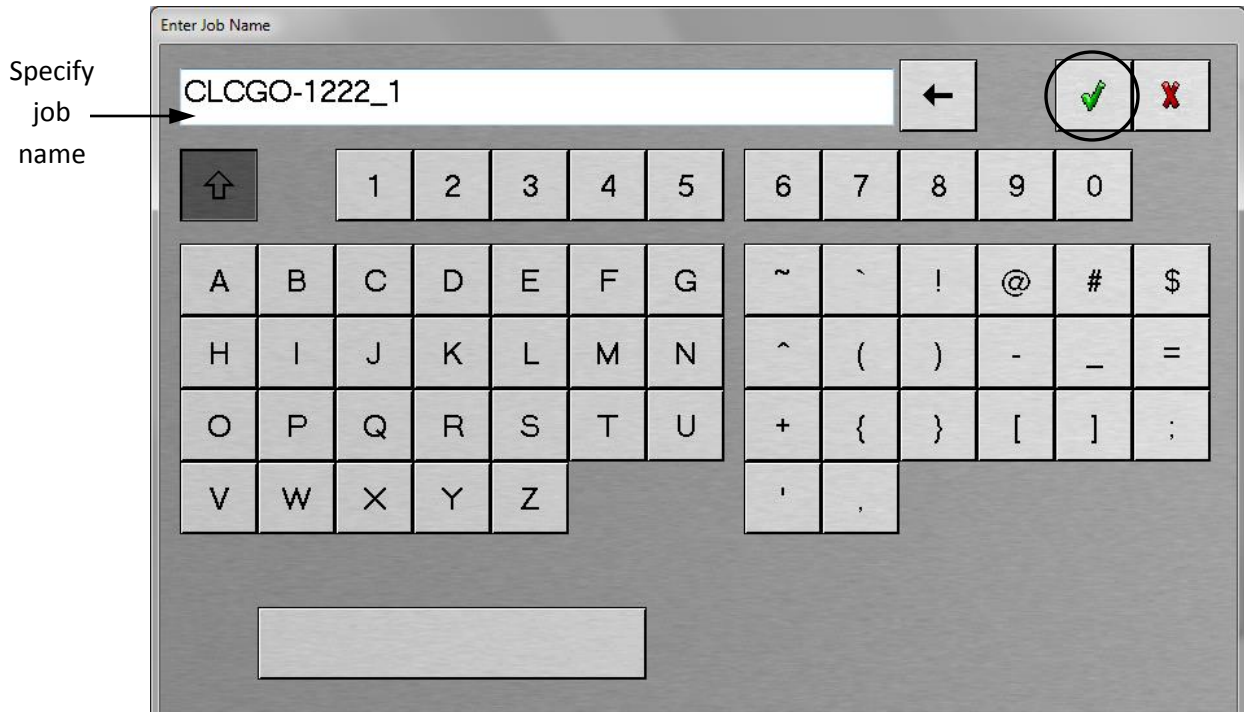
1. Touch the **Job Management** button on the main toolbar to access the Job Management view. The Job tab is selected by default.



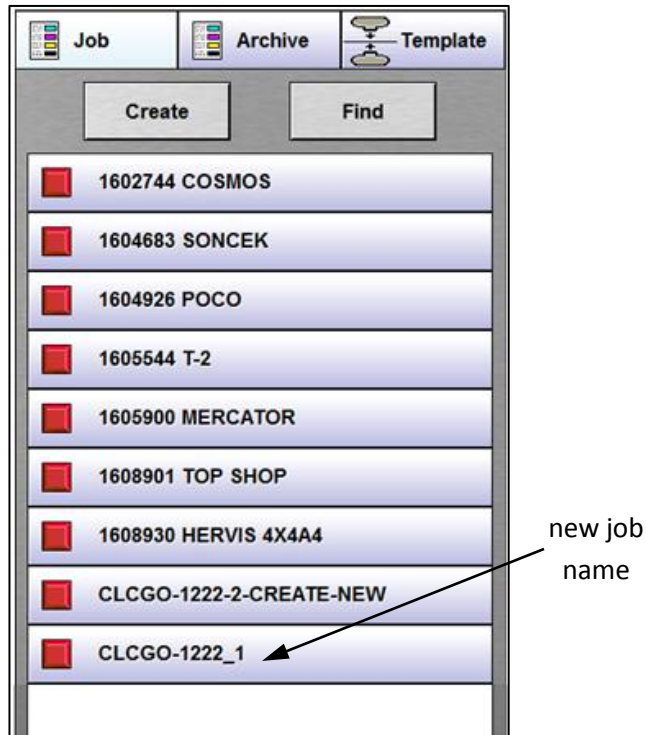
2. Touch the **Create** button and the Create Job dialog displays.



3. Touch anywhere in the **Job Name** field and the Enter Job Name keypad displays.



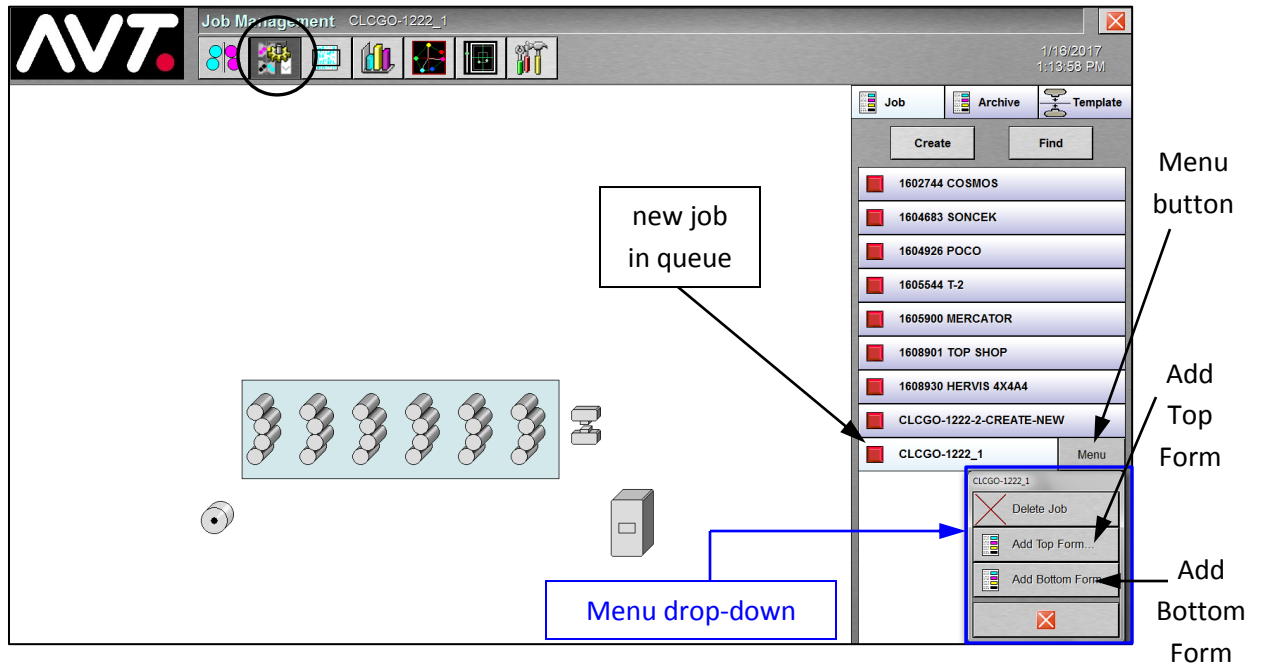
4. Touch the appropriate keys to enter the **job name** and then touch . The new job name displays in the job queue.



5. Continue with [Set Up Forms for New Job](#).

3.2 Set Up Forms for New Job

You can choose to set up a form for either the top or bottom surface, or for both surfaces, depending on your job configurations.



1. Touch the new job in the job queue (**CLCGO-1222_1**, in this example) and a Menu button displays next to the job name.
2. Touch the **Menu** button.
3. Touch **Add Top Form** in the drop-down menu and the Job Management (Add Form) screen displays with the Details tab selected.

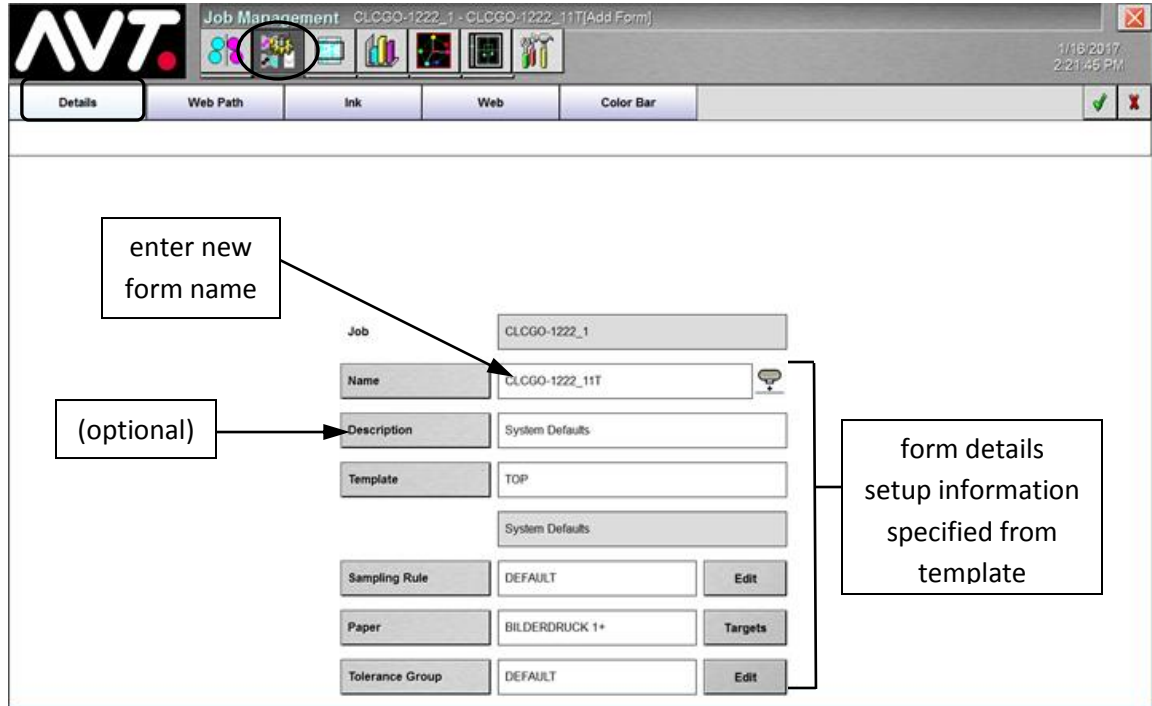
Note #1: In this example, we are setting up a top form. To set up a bottom form, touch **Add Bottom Form** and repeat all the same steps.

Note #2: Microcolor II forms must be numeric. Mercury and OEM forms can be alphanumeric.


4. Continue with [Specifying Form Details Setup Information](#).

3.2.1 Specifying Form Details Setup Information

If a default template has been set, you will see the **Name**, **Description**, **Template**, **Sampling Rule**, **Paper**, and **Tolerance Group** fields automatically filled in on the Details screen.

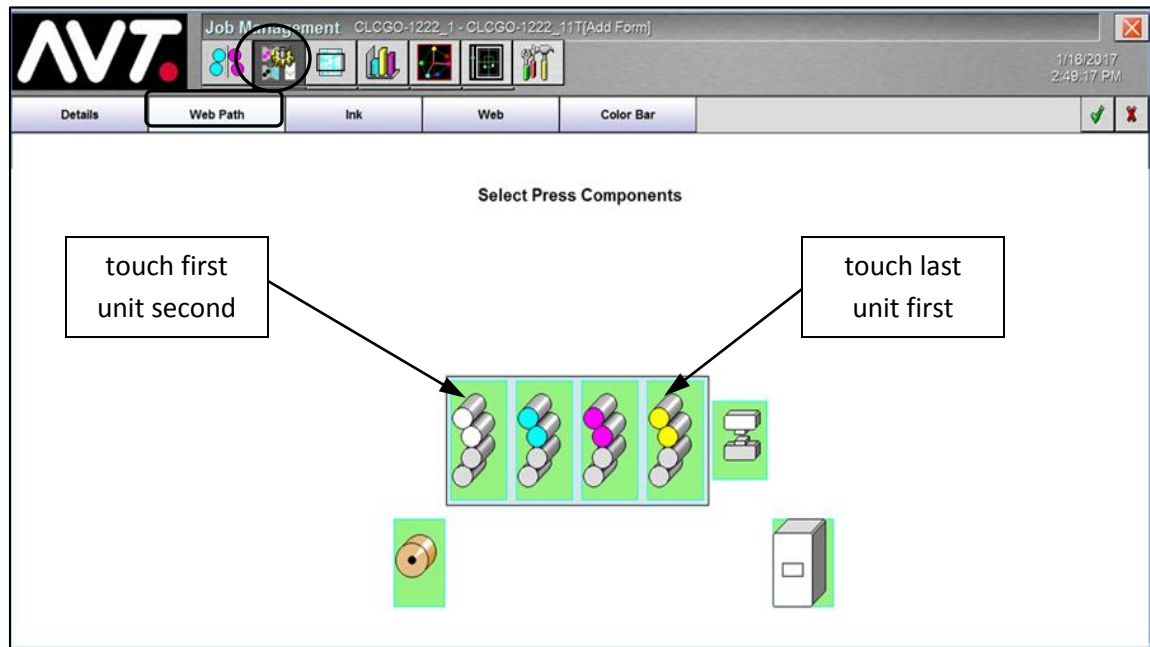


If a default template has not been set:

1. Touch anywhere in the **Name** field, enter a new form name, and then touch .
2. To select a template, sampling rule, paper type, or tolerance, touch anywhere in the **Template**, **Sampling Rule**, **Paper**, or **Tolerance Group** fields and select from the lists of templates, sampling rules, paper types, or tolerance groups.
3. To select targets for a paper type, click on **Targets** and specify the target tolerances, overprints, and grays.
4. After specifying all the form details setup information, touch the **Web Path** tab and continue with [Validating and Activating Web Path Information](#).

Note: If you use the default template and do not need to change any other settings, go to [Saving the Form for a Job](#).

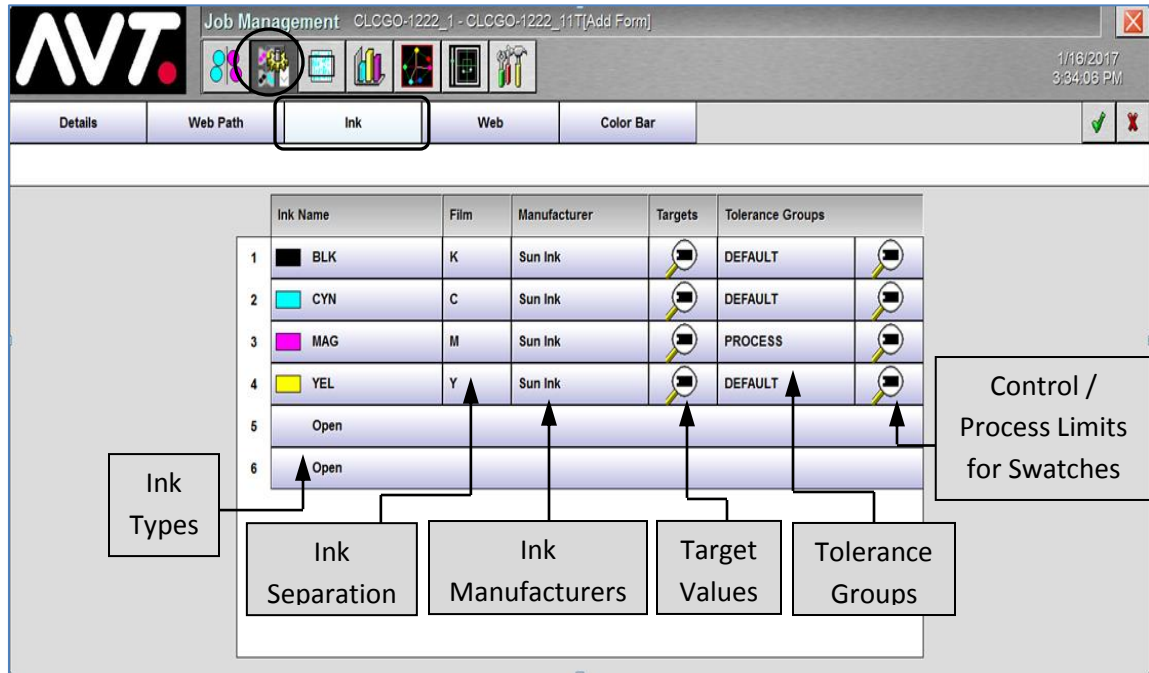
3.2.2 Validating and Activating Web Path Information



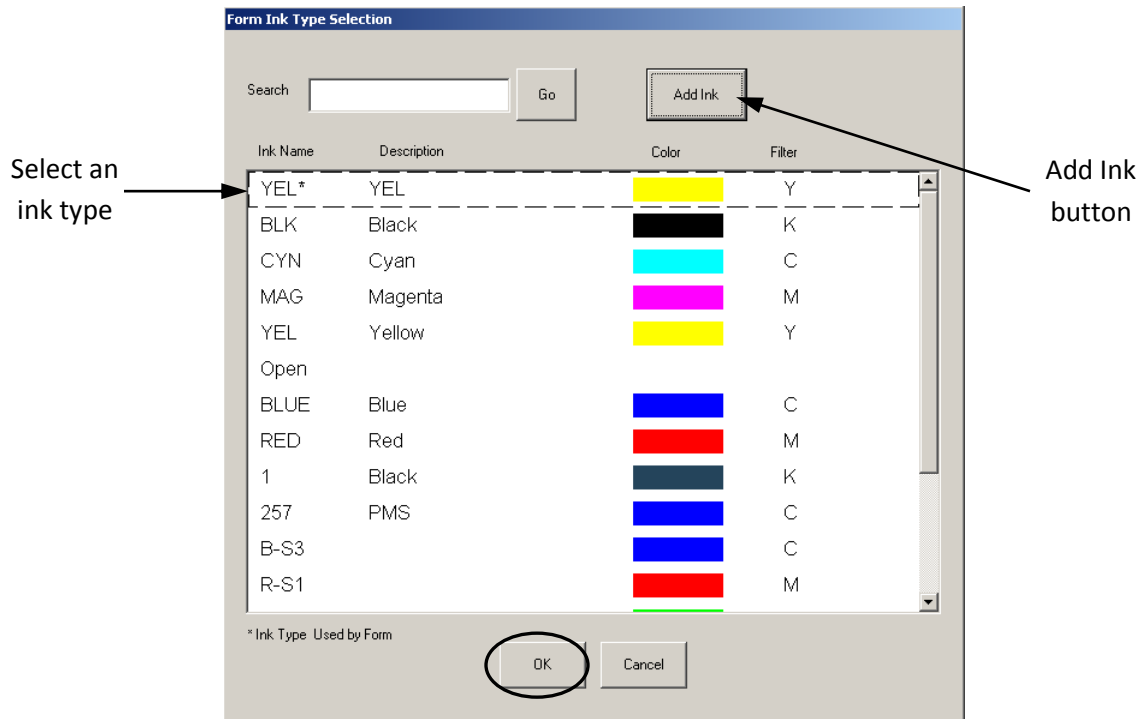
1. Validate the web path configuration values.
2. If the active units need to be changed, touch the **last unit** in the group and then touch the **first unit** in the group.

This will activate all the units between the selections. (In the example, we selected unit 4 and then unit 1, which will set active units 1, 2, 3, 4.)
3. After validating or changing web path information, touch the **Ink** tab and continue with [Validating and Changing Inker Configuration Values](#).

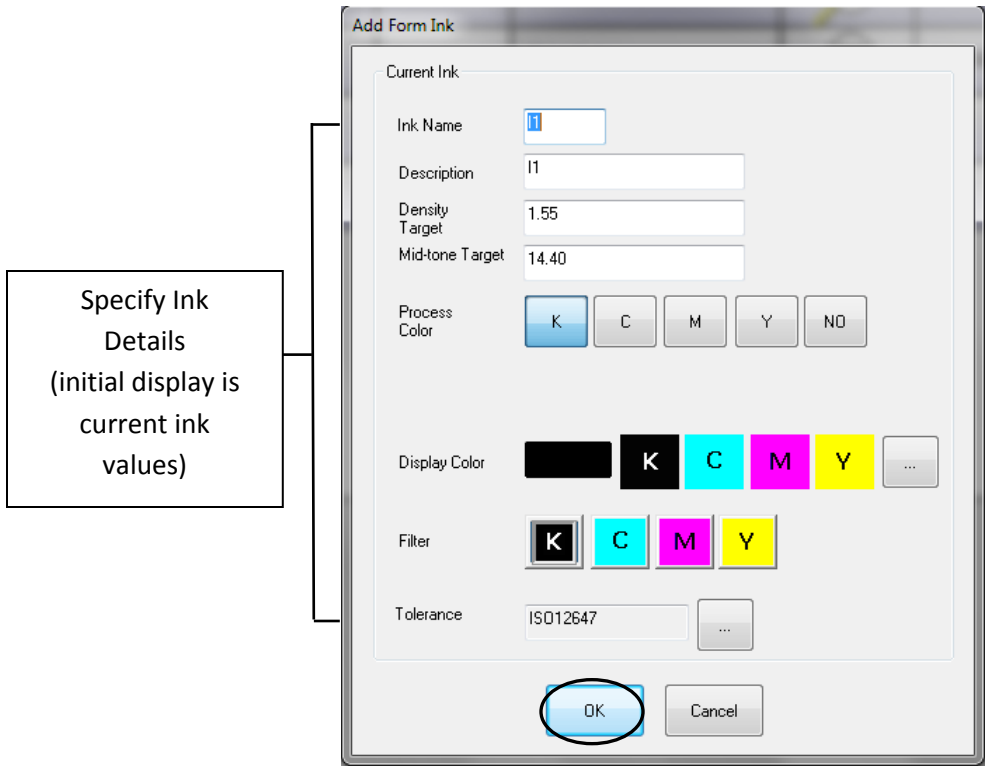
3.2.3 Validating and Changing Inker Configuration Values




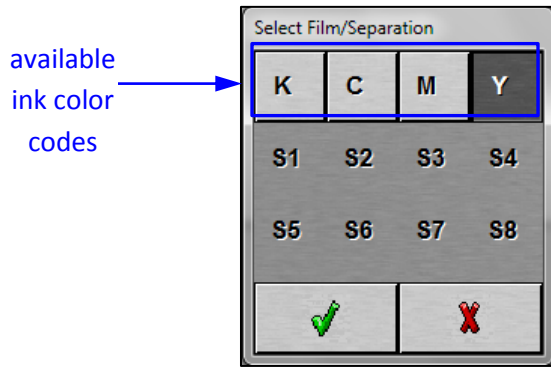
1. Validate the inker configuration values for the selected template.
2. To change an ink type, touch anywhere in an **ink types** field, select an **ink type** on the Form Ink Type Selection dialog, and then touch **OK**.



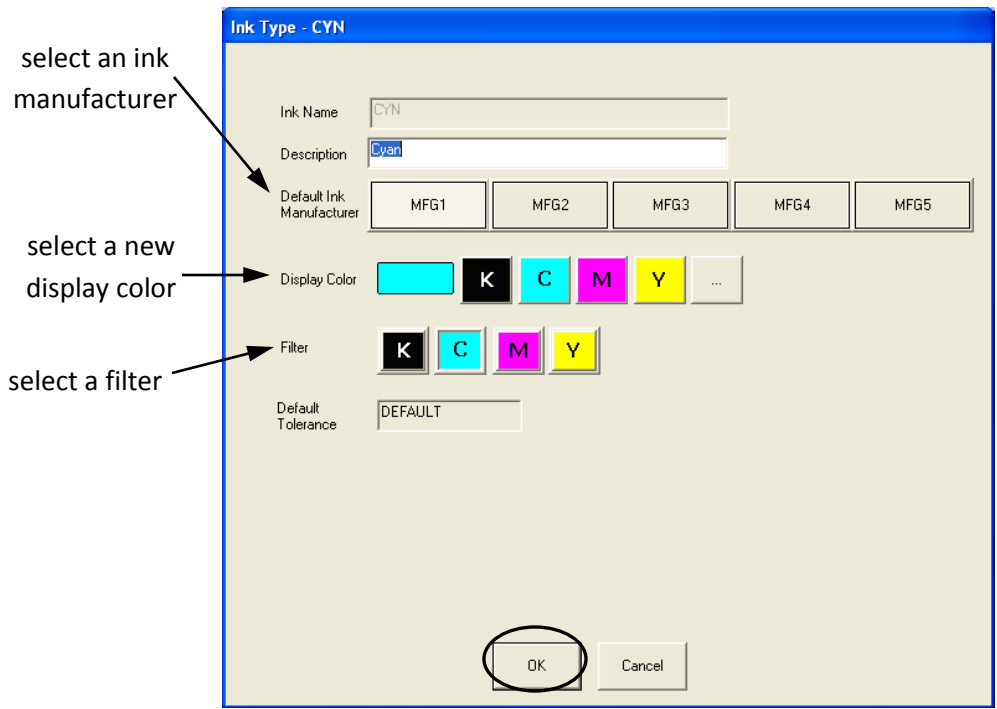
To add a new ink for your form, touch the **Add Ink** button, specify the **new ink details** on the Add Form Ink dialog, and then touch **OK**.




3. To change an ink separation, touch anywhere in a **Film** field for an ink type. On the Select Color Code dialog, select an available **ink color code** and then touch .



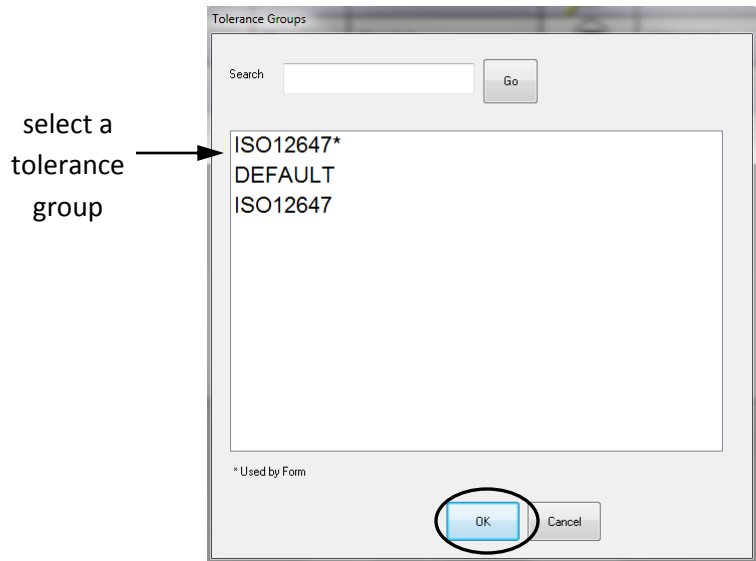
- To change an ink manufacturer (and other ink type values), touch anywhere in a **Manufacturer** field for an ink type. On the Ink Type dialog, select a different **ink manufacturer**, a new **display color**, or a different **filter**. Touch **OK**.




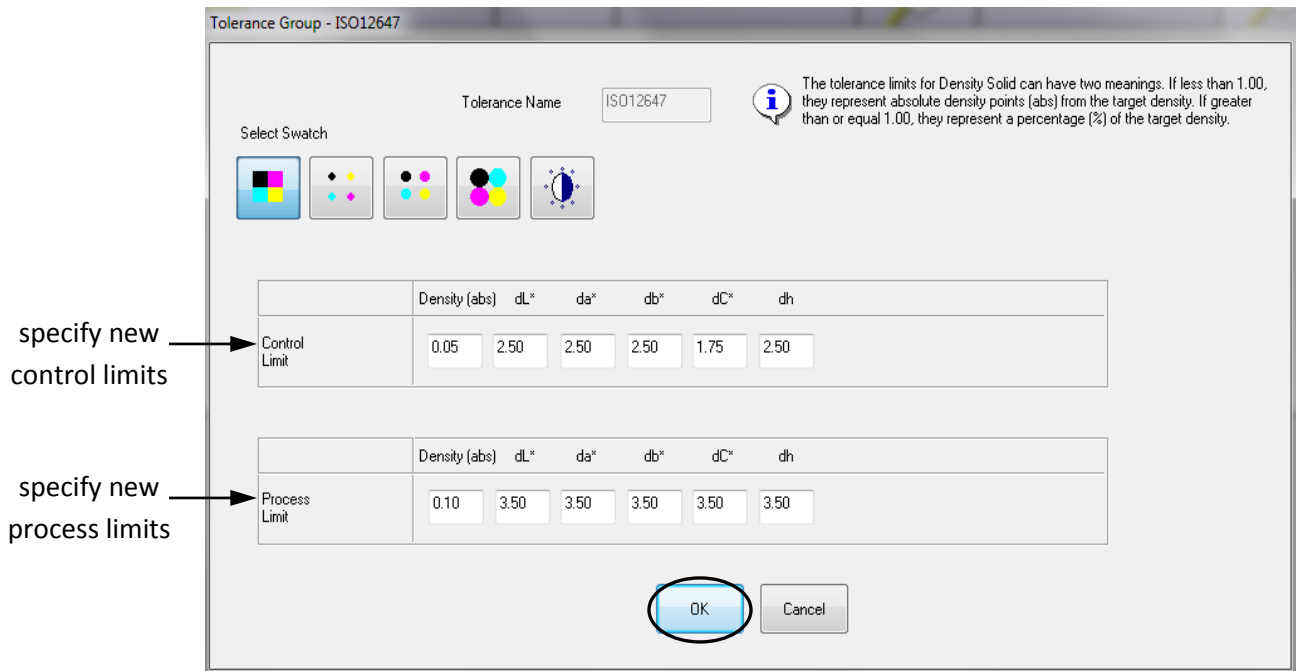
- To change the target density values, touch a  button under **Targets**, enter new **target density values** on the Target Setup dialog, and touch **OK**.



- To change the tolerance group, touch anywhere in a **Tolerance Groups** field for an ink type, select a **tolerance group** on the Tolerance Groups dialog, and then touch **OK**.

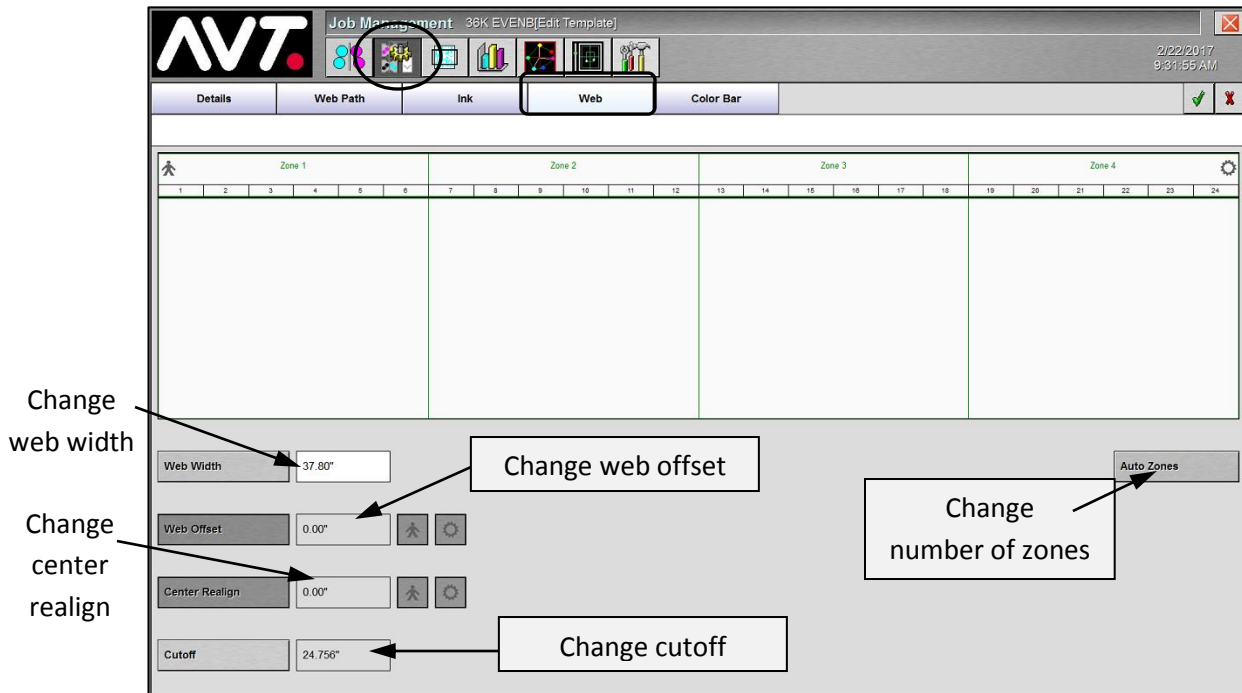


- To view details or make changes to a tolerance group, touch the  button to the right of the tolerance group, enter new **control** or **process limits** on the Tolerance Group dialog, and then touch **OK**.



- After validating and changing inker configuration values, touch the **Web** tab and continue with [Validating and Changing Web Width/Offset & Center Realign](#).

3.2.4 Validating and Changing Web Width/Offset & Center Realign

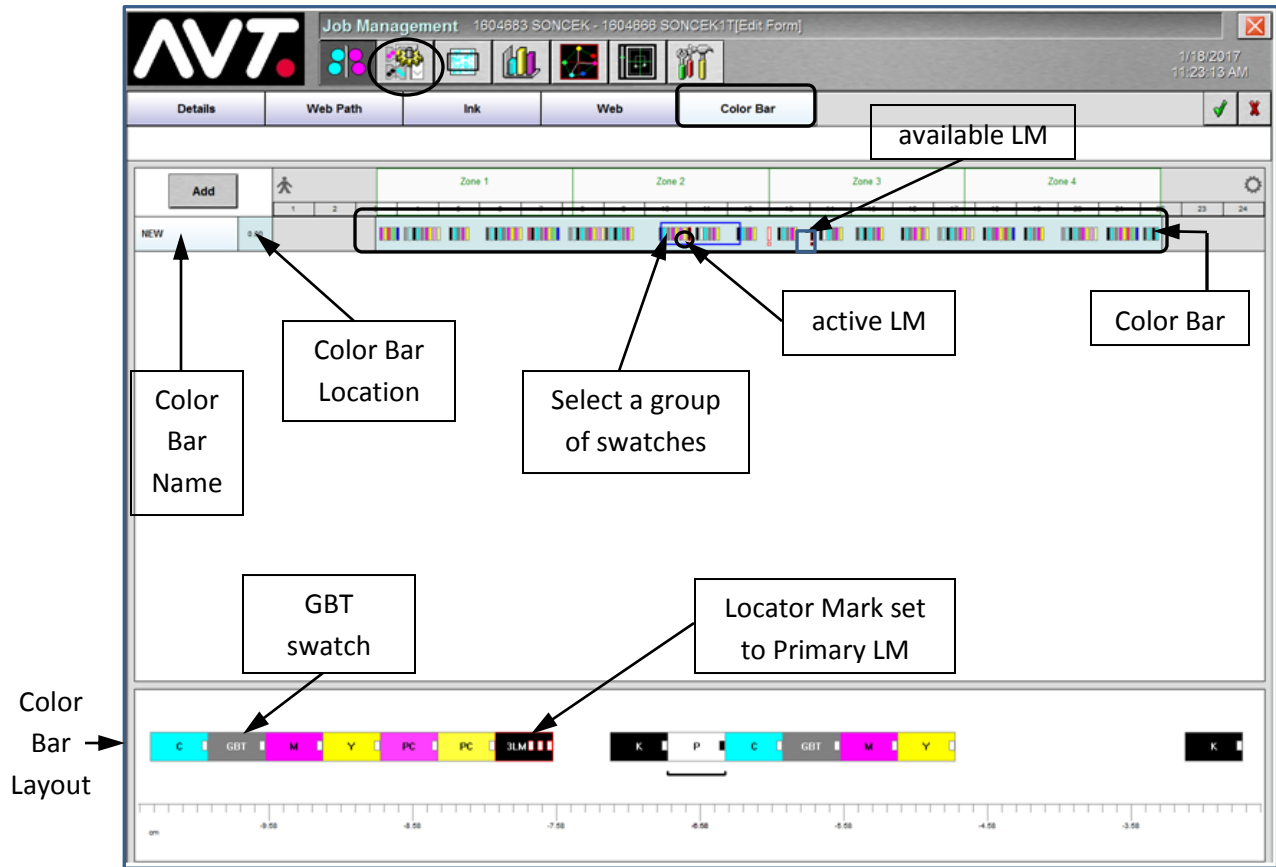


1. Validate the web width value for your web. Web width is the scanning width and may be less than the actual paper width.

Note: If Web Width is set to full width of web, Web Offset and Center Realign are disabled. Valid ranges for Web Width, Web Offset, and Center Realign will vary depending on web configuration.
2. To change the web width, touch anywhere in the **Web Width** field, enter the new value when the keypad displays, and then touch .

Note: Web width must be the same for both the top and bottom forms. If you change web width for one surface, the other surface is automatically updated to the same value.
3. To change a web offset, touch anywhere in the **Web Offset** field, enter the value when the keypad displays, and then touch . Web offset is the distance the web is off center through the print units.
4. To change center realign, touch anywhere in the **Center Realign** field, enter the value when the keypad displays, and then touch . Center realign is the amount the web is off center between the print units and the On-Press module.
5. To change the cutoff value, touch anywhere in the **Cutoff** field, enter the value when the keypad displays, and then touch .
6. To change the number of zones that display, touch the **Auto Zones** button, enter number of zones when the keypad displays, and then touch .
7. After validating or changing the web width/offset, center realign, and auto zones, touch **Color Bar** tab and continue with [Validating and Changing the Color Bar](#).

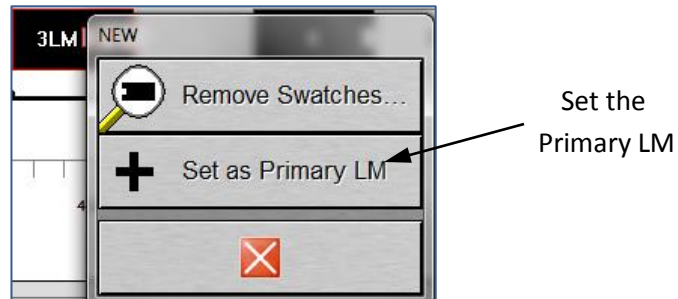
3.2.5 Validating and Changing the Color Bar



1. Validate the currently selected color bar.
2. To view the color bar layout, touch a group of **swatches** on the color bar and the color bar layout displays in the bottom section.
3. To delete an individual swatch, touch a **swatch** on the color bar layout and then touch **Remove Swatch** from the drop-down menu.

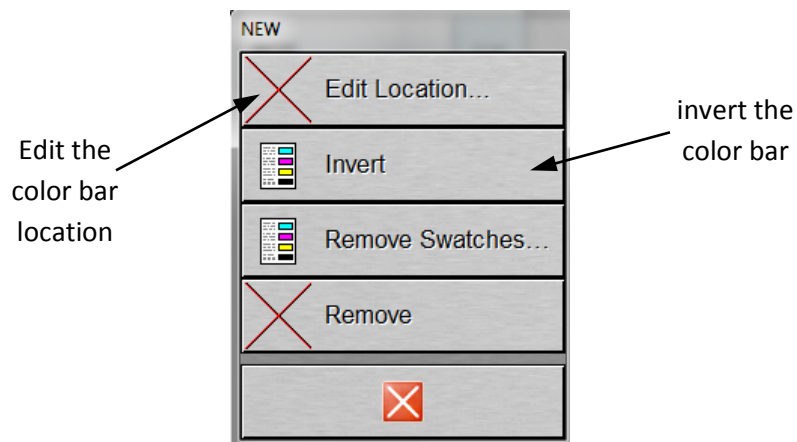


4. To set the active locator mark (LM), touch an available **locator mark (LM)** on the color bar layout and then touch **Set as Primary LM** from the drop-down menu.




The active LM displays with a white background.


5. To invert the color bar, touch the **color bar name** and then touch **Invert** from the drop-down menu.

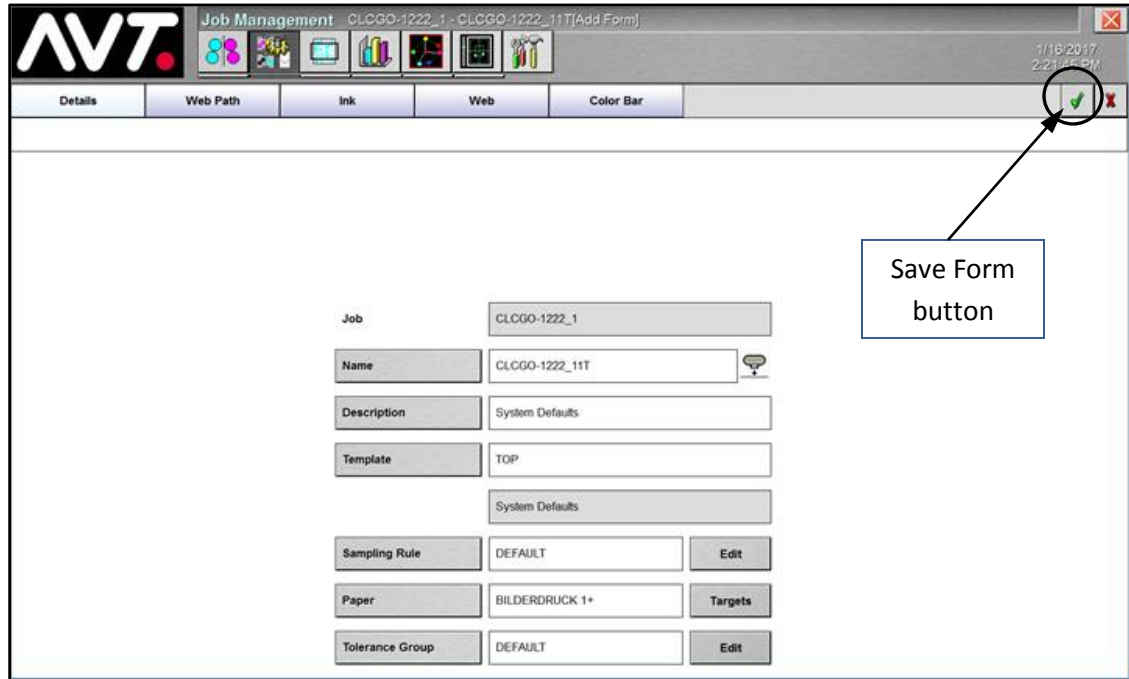


You can view the color bar before and after the invert in the bottom section, in the color bar layout.

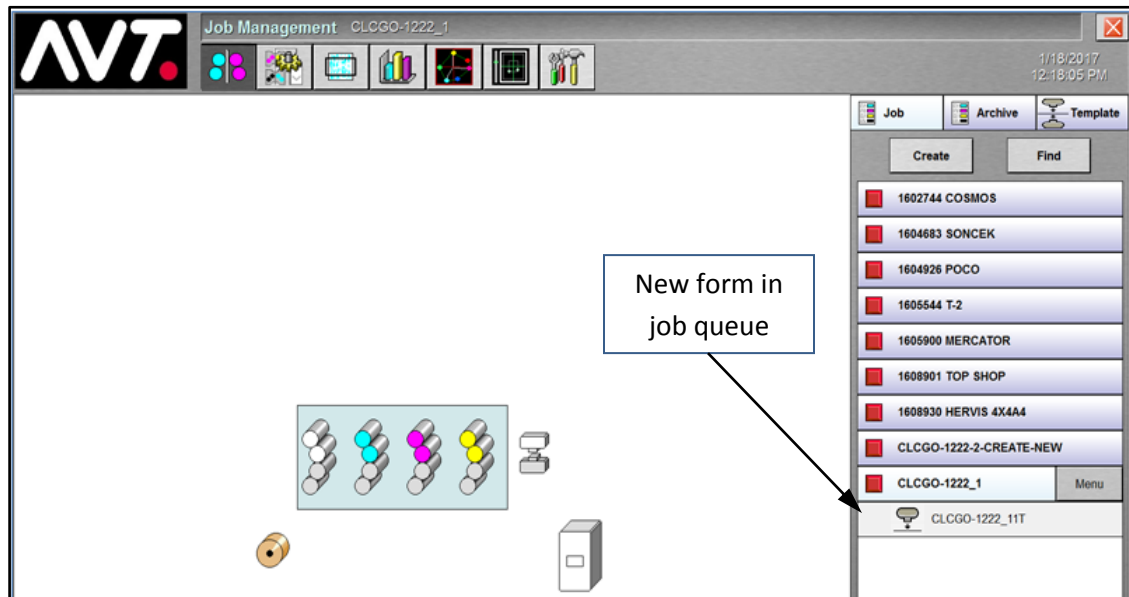
6. To edit the color bar location, touch the **color bar name** and then touch **Edit Location** from the drop-down menu. Enter the location value and then touch .
7. After validating and changing the color bar, you can continue with [Saving the Form for a Job](#).

3.2.6 Saving the Form for a Job

You can save a form for a job by touching the  button from any of the tabs on the Job Management (Add Form) screen.



The Job Management (Add Form) screen closes and the Job Management view redisplay with the new form name in the job queue.

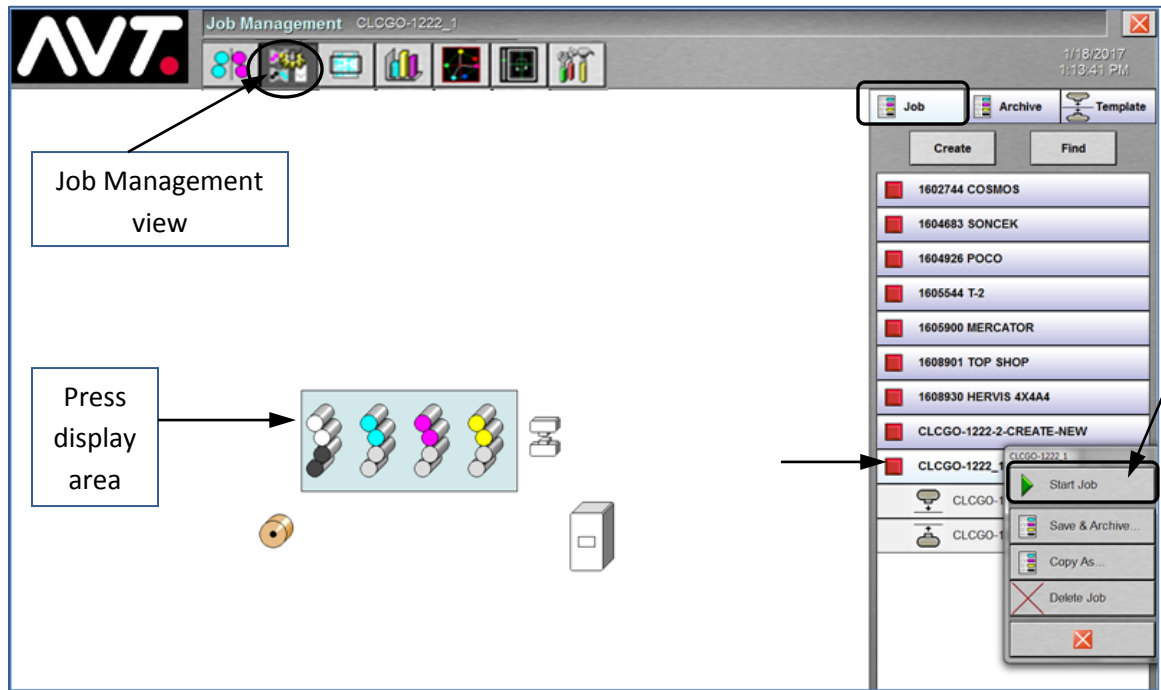


4 Running a Job

This section introduces the basic elements of using Clarios to start a job, monitor a job, view scan data, adjust targets, and run in closed loop control.

4.1 Start a Job and Monitor Scan Startup

You start a job and monitor scan startup from the Job Management view.

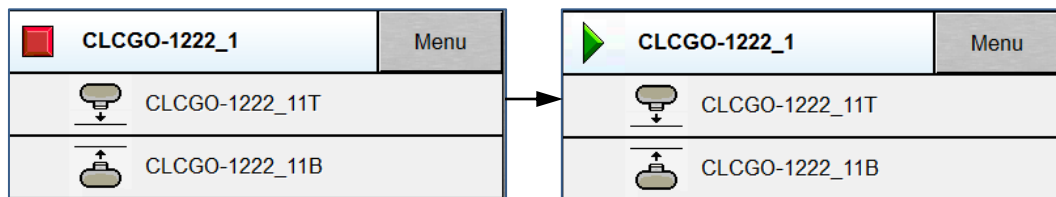


1. Touch the **job** you want to start in the job queue (**CLCGO-1222_1**, in this example) and then touch the **Menu** button.

Note: You can also use the Find button to locate a job in the job queue.

2. Touch **Start Job** from the drop-down menu.

The icon changes from  to  when the job starts.



3. Monitor the scan start up in the **press display area**.

The probe heads are set to scan by default. Conditions required to start scanning are:

- Press is running at minimum speed. This minimum speed varies on different presses, but is typically 300 FPM (90 MPM) and stable.
- Impression is on for one minute or more.
- No active or imminent splice, or blanket wash.

After these conditions are met, the camera icons will remain yellow until the color bar is located and verified. When the camera icons turn green, this indicates that it has gone into production mode.

4.2 Monitor Job from Web Data View

Touch the **Web Data** button on the main toolbar. You monitor a job and view scan data on the Web Data view. Delta Density is the default Web Data view.

The screenshot displays the AVT Web Data interface for a job titled "1804883 SONCEK: 1804888 SONCEK1T, 1804888 SONCEK1B (web 1)". The interface is divided into four zones (Zone 1, Zone 2, Zone 3, and Zone 4) across 24 columns. Each zone shows a series of data points with color-coded bars (black, cyan, magenta, yellow) and icons (X, checkmarks, arrows) indicating scan status. The top toolbar includes a "Web Data" button and "Switch modes" buttons. The right-side control panel features "ink control buttons" (up/down arrows, zoom in/out, check/cancel) and "Scan Control buttons / Scan State icons" (Scan ON/OFF, Scan 3, Scan 1, Scan 2). Annotations include "tabs to switch between" pointing to the zone tabs, "Switch modes" pointing to the top toolbar, "ink control buttons" pointing to the right-side control panel, and "Scan Control buttons / Scan State icons" pointing to the bottom of the right-side control panel.

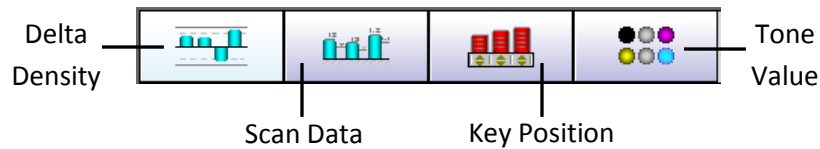
4.2.1 Switching Web Data Views and Modes

There are four views and four modes for the Web Data view.

Switch between Web Data Views

The four Web Data views are **Delta Density**, **Scan Data**, **Key Position**, and **Tone Value**. Each view shows detail measurement data in graphical form for the top and bottom of the web. Four zones are shown in the views.

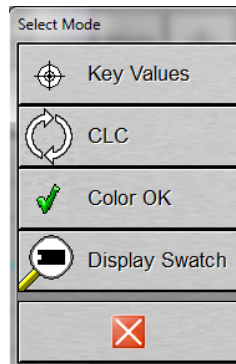
You use the two sets of **tabs** for top and bottom forms to switch between Delta Density, Scan Data, Key Position, and Tone Value (formerly Dot Gain) views.



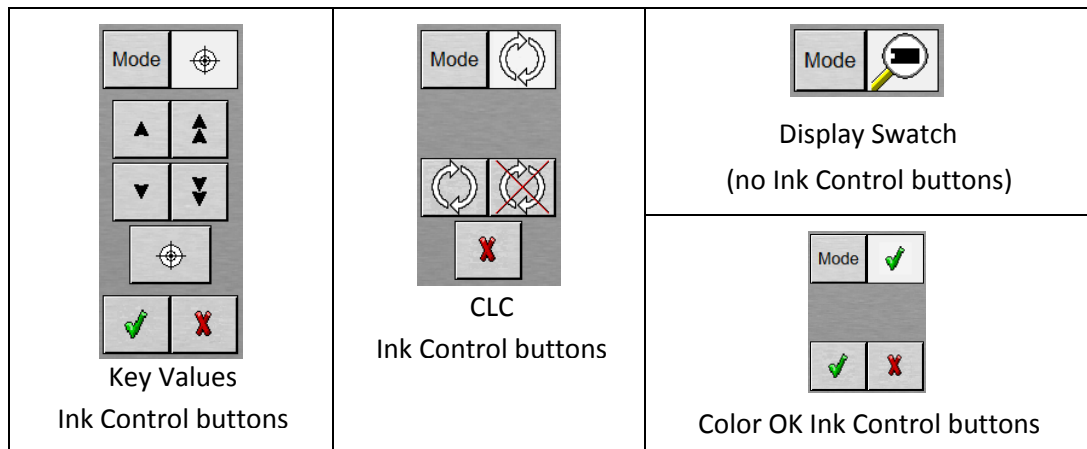
Switch Modes

The available modes for the Web Data views are **Key Values**, **CLC**, and **Display Swatch**. The default mode is Key Values.

1. Touch the **Mode** button.



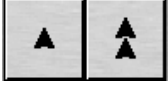















2. Touch **Key Values**, **CLC**, or **Display Swatch** on the Select Mode drop-down menu and the appropriate ink control buttons display.









4.2.2 Using Ink Control Buttons

Depending on the mode you are in, you can use the ink control buttons to increase/decrease ink from keys to target values.

Use Ink Control Buttons in Key Values Mode

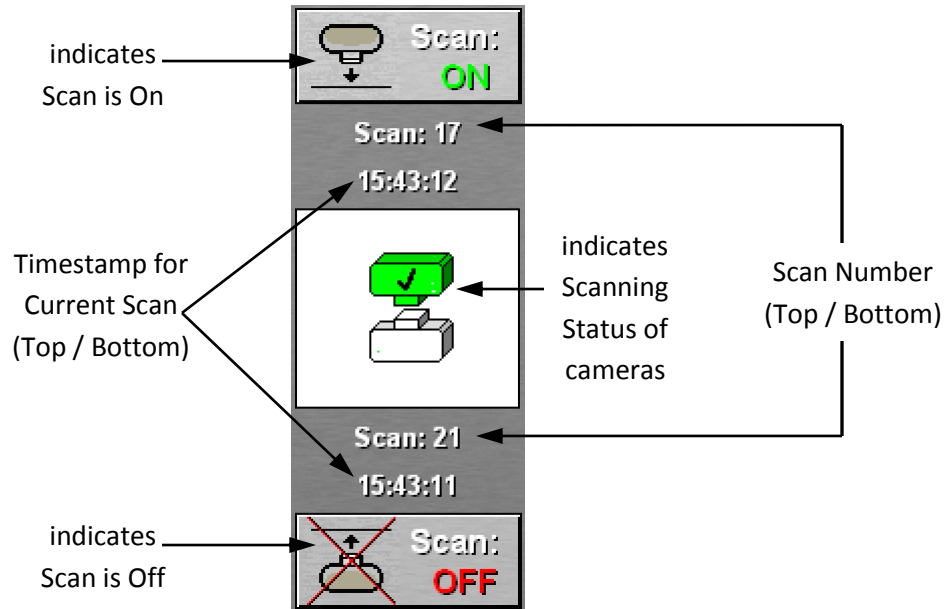
	<p>Touch the  or  button to add ink to target value.</p> <ul style="list-style-type: none"> •  adds ink in small increments (0.01). •  adds ink in large increments (0.10).
	<p>Touch the  or  button to decrease ink to target value.</p> <ul style="list-style-type: none"> •  decreases ink in small increments (0.01). •  decreases ink in large increments (0.10).
	<p>Touch one or more ink keys and then touch  to display the Set Target Density keypad, where you can specify a target value for adjusting ink.</p>
	<p>Touch the  button to apply or affect any change.</p>
	<p>Touch the  button to undo any recent change.</p>

Use Ink Control Buttons in CLC Mode

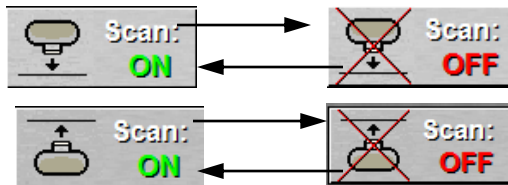
	<p>Touch the  button to turn on CLC for selected ink zones.</p>
	<p>Touch the  button to turn off CLC for selected ink zones.</p>
	<p>Touch the  button to undo any recent changes.</p>

4.2.3 Using Scan Control Buttons and Scan State Icons

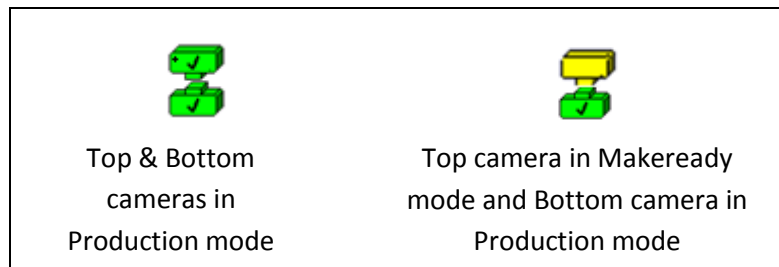
There are scan control buttons and scan state icons for the top and bottom cameras that display under the ink control buttons.



The **scan control** buttons indicate whether top and bottom cameras are scanning. They are toggle buttons to turn scanning **On** and **Off**.



The **scan state** icons display scanning status (white, green, yellow, or red) of the top and bottom cameras. They are also toggle buttons to switch between production and makeready modes.



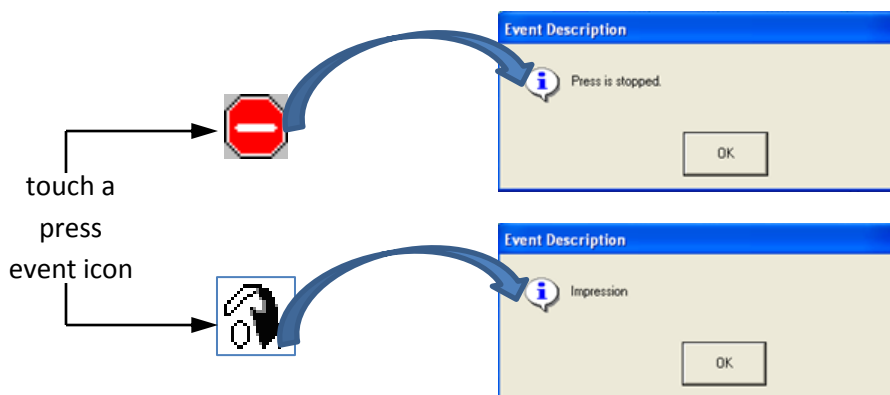
You can also view the **scan number** and **timestamp** for both top and bottom cameras.

4.2.4 Viewing Press Events

If an event that inhibits scanning occurs on the press, an icon representing the event displays on the Web Data view under the scan control buttons.

The screenshot shows the AVT Web Data interface. The top header includes the AVT logo, the text 'Web Data 1804883 SONCEK 1804886 SONCEK1T, 1804886 SONCEK1B (web 1)', and the date/time '11/17/2017 10:07:32 AM'. Below the header is a toolbar with various icons. The main area is divided into four zones (Zone 1, Zone 2, Zone 3, Zone 4) with a grid of data points. Each data point consists of a colored bar (black, cyan, magenta, yellow) and a numerical value. A red 'Press Events' icon is highlighted in the right-hand control panel, with an arrow pointing to it from the text 'Press Events' on the right.

Touch a **press event icon** and an Event Description dialog box displays with a brief explanation of the event.



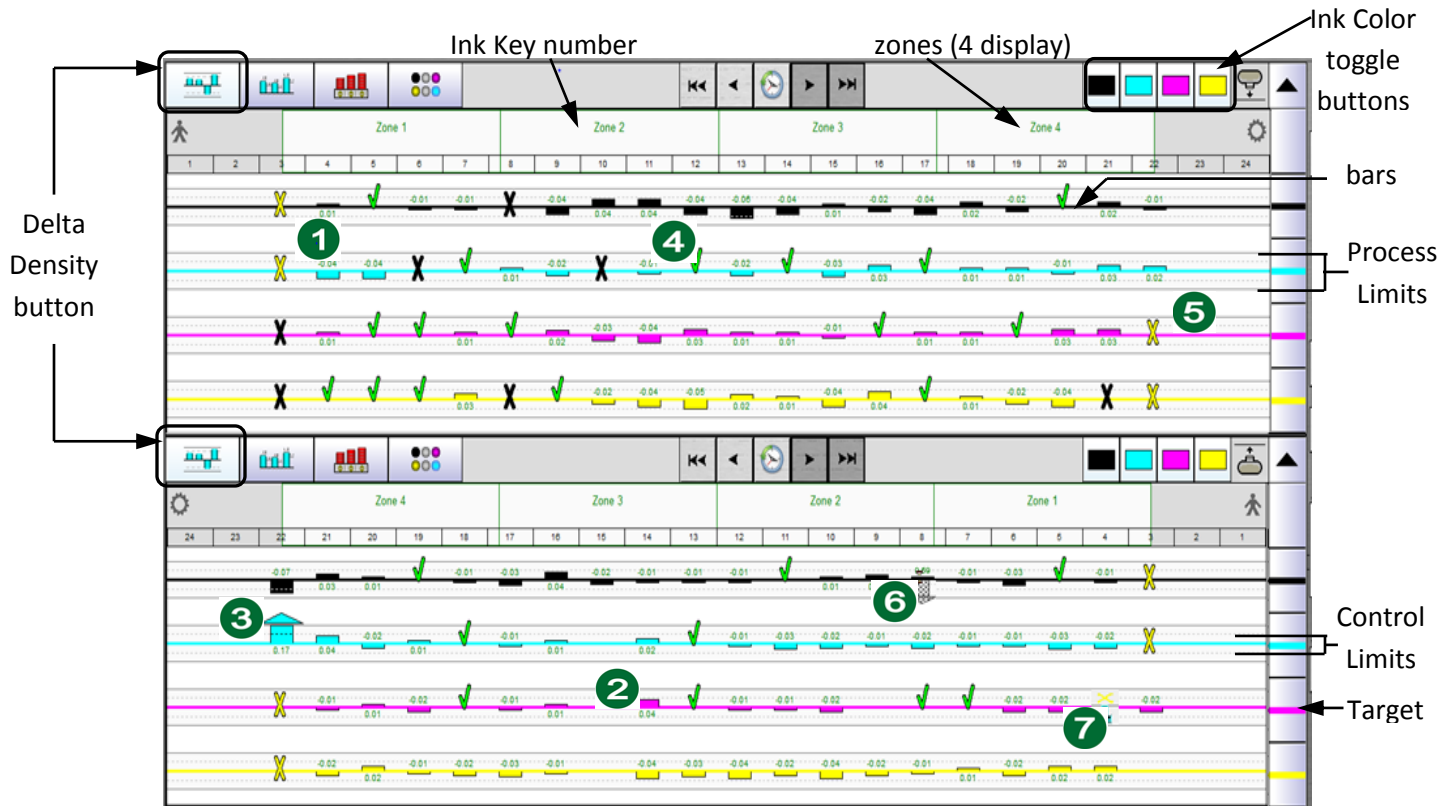
Touch **OK** to close the Event Description dialog box.

4.3 View Scan Data on Web Data View

You can view scan data on four different views of the Web Data View.

4.3.1 Viewing Delta Density Data

The **Delta Density** view is a graphical display of the calculated delta density value, which is the scan data value minus the target data value of individual inkers.

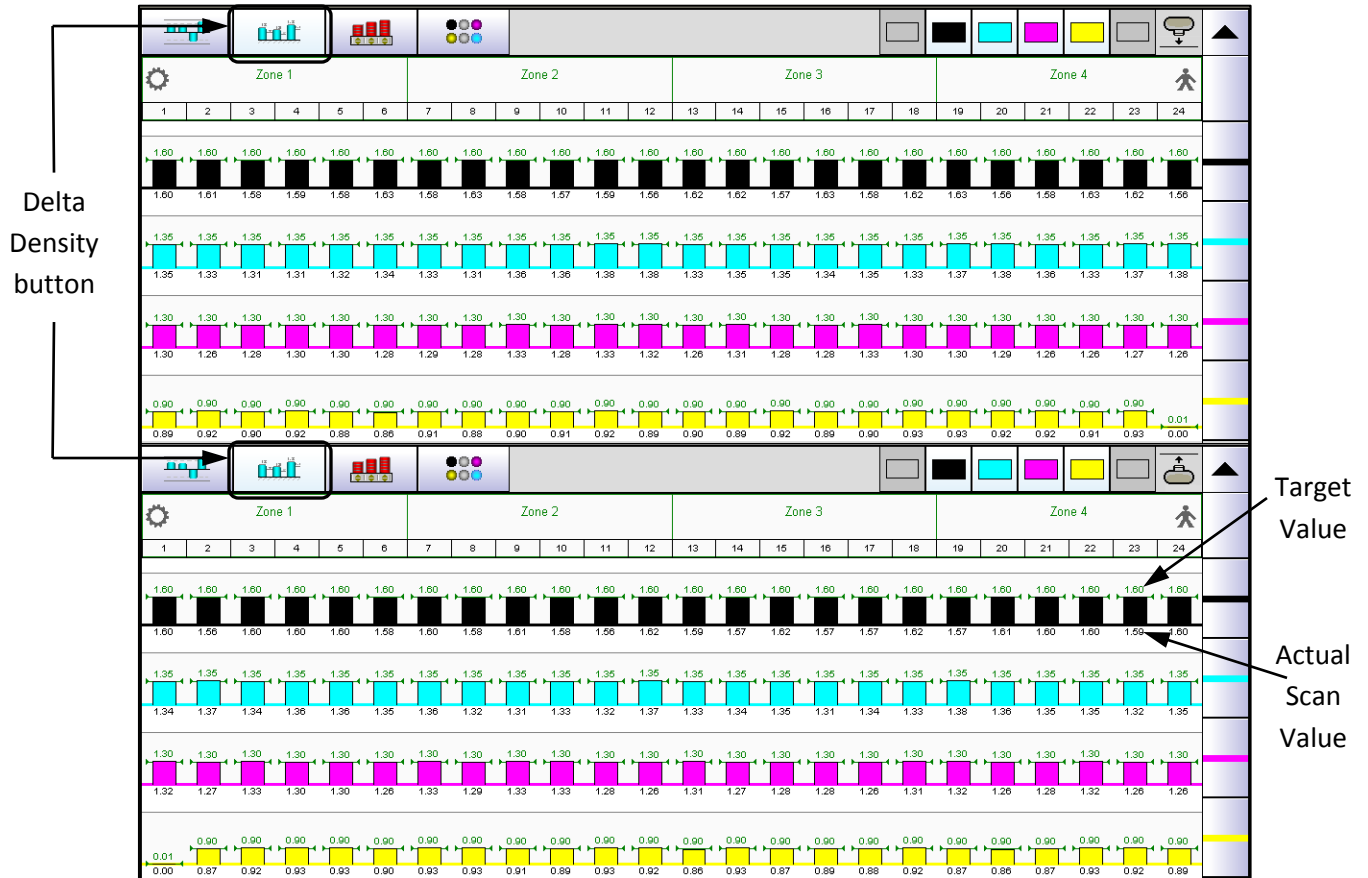


1		Below Target	5		No Measurement
2		Above Target	6		Timed Out
3		Outside Process Limit	7		Interpolated
4		At Target			

See [Troubleshoot a Job](#) for more details on swatch errors.

4.3.2 Viewing Scan Data

The **Scan Data** view shows the actual scanned (not calculated) values in graphical form. The target value and actual scan value are displayed next to each other.

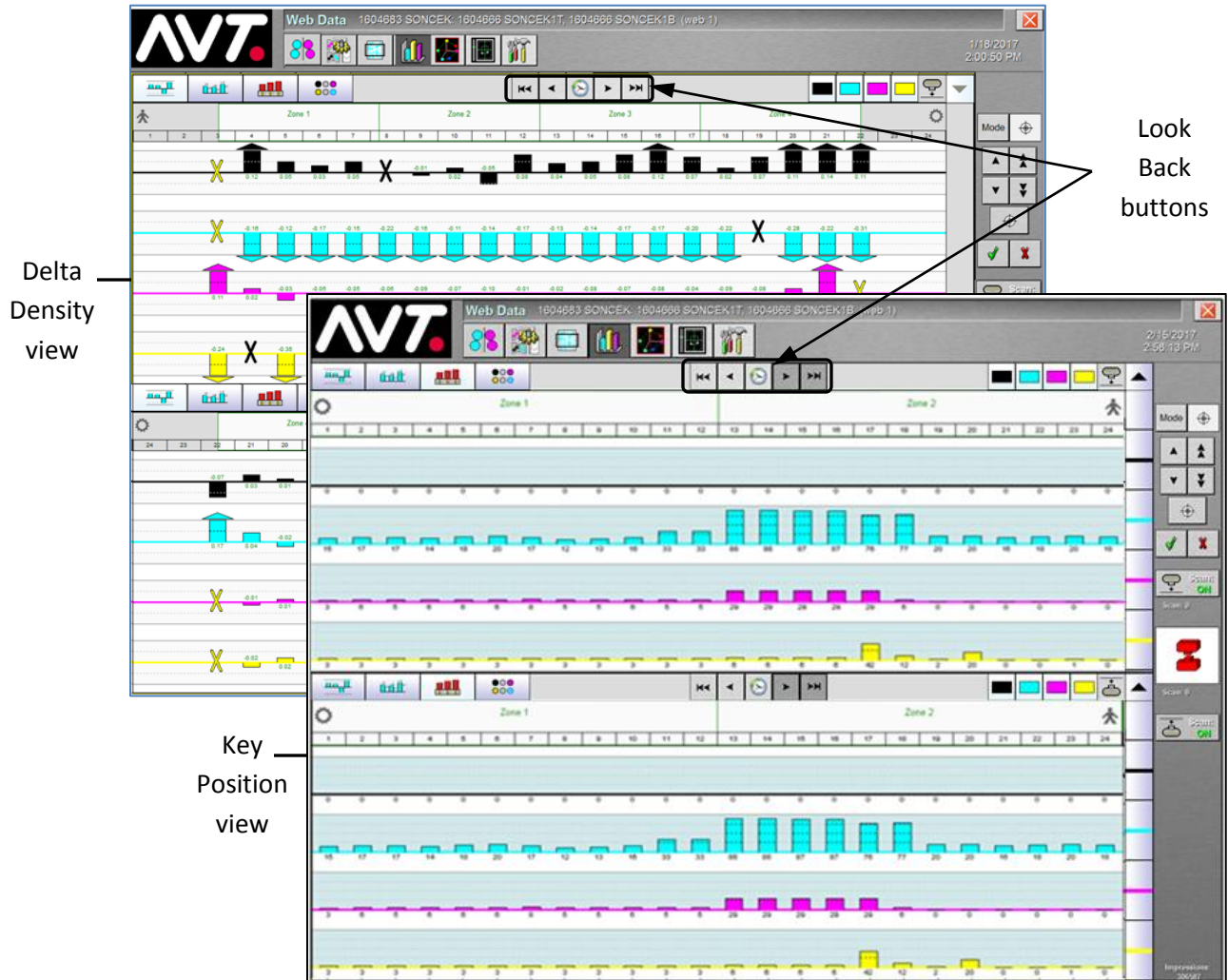


4.3.3 Viewing Trend Historical Data using Look Back Controls

The Delta Density and Key Position views include Look Back buttons to view historical trend data.

Note: The system saves a maximum of 1000 scans for every form of a job and maintains the last 1000 scans for every scan during a job run.

See the *Clarios Advanced User's Manual* for more detailed information.



You can use the Look Back buttons to view historical scan data on trend reports.

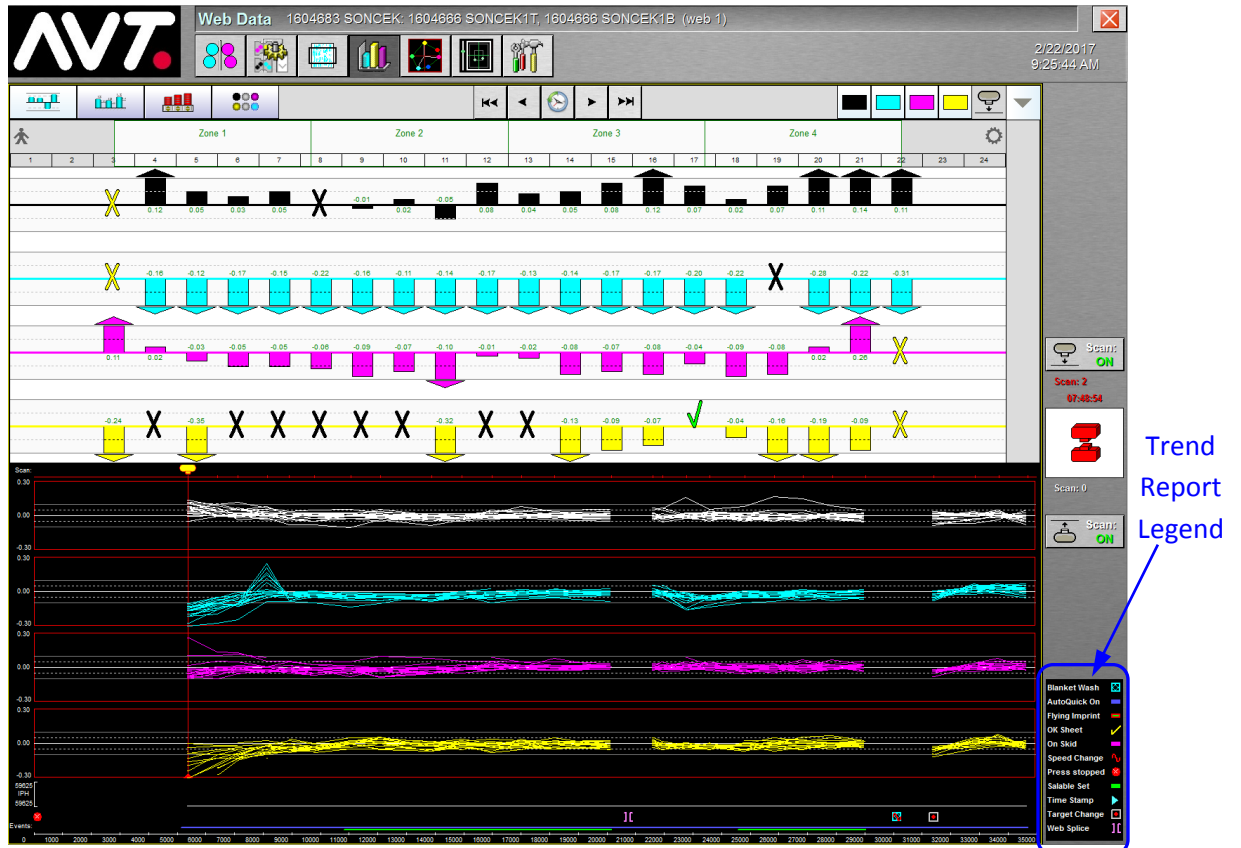
Look Back Buttons



	<ul style="list-style-type: none"> Calculates trend range based on historical scans. Displays trend and highlights oldest scan with timeline; refresh view for highlighted scan.
	<ul style="list-style-type: none"> If look-back mode <u>not</u> enabled, gets current scan number and calculates trend range. Displays trend and highlights previous with timeline. If look-back mode enabled, gets current displayed scan and subtracts 1 from number. If resulted scan is in trend range, moves timeline in trend and refreshes view. If resulted scan is <u>not</u> in trend, requests data from server, updates trend and view.
	<ul style="list-style-type: none"> Request that user enter valid scan number and calculates trend range. Displays trend and highlights entered scan with timeline; refresh view for highlighted scan.
	<ul style="list-style-type: none"> If look-back mode enabled, gets current displayed scan number and adds 1 to number. If resulted number is latest scan, disables look-back mode and displays latest scan. If scan result is historical and in trend range, moves timeline in trend and refreshes view. If scan result is historical and <u>not</u> in trend range, requests data from server, updates trend and view.
	<p>If look-back mode enabled, disables it and displays latest scan results.</p>

Sample – Delta Trend Report (Top Surface)

The following diagram shows an example of a Delta Trend report for the top surface.

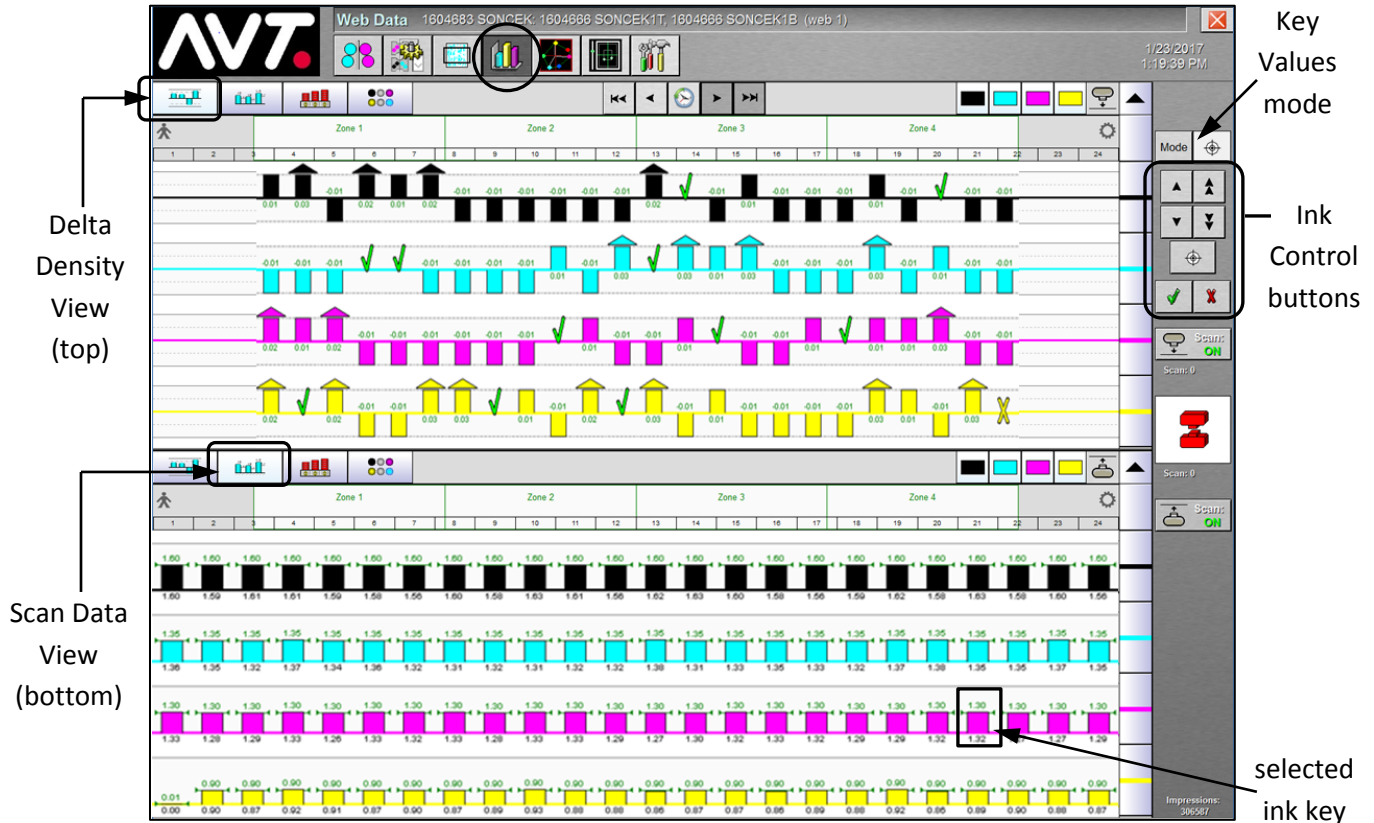


4.4 Make Target Adjustments


















You can adjust targets on the Web Data View.

4.4.1 Adjusting Targets on Web Data View

You can adjust target densities using the Ink Control buttons from the Delta Density or Scan Data views. Selecting and adjusting target densities is the same in either view.



Note: You must be in **Key Values** mode to adjust target densities using the Ink Control buttons. You can use any of the “activated” Ink Control buttons to control the ink keys.

1. Touch an **ink key** to select it. It becomes highlighted with a gray box.
 
2. Touch the  button to add ink to the target value in small increments. For every touch, the target value increases by 0.01 and is incremented graphically on the ink key in the view.
 

3. Touch the  button to add ink to the target value in large increments. For every touch, the target value increases by 0.10 and is incremented graphically on the ink key in the view.
 

4. Touch the  button to decrease ink to the target value in small increments. For every touch, the target value decreases by 0.01 and is decremented graphically on the ink key in the view.
 

5. Touch the  button to decrease ink to the target value in large increments. For every touch, the target value decreases by 0.10 and is decremented graphically on the ink key in the view.
 

6. Touch the  button to specify a target density value using the numeric keypad. Valid values are 0.01 - 3.0.
 
7. Touch  to apply the change or  to undo the change.

Adjust Targets by Inker

Touch one of the **color select lines** to adjust targets for an entire inker.

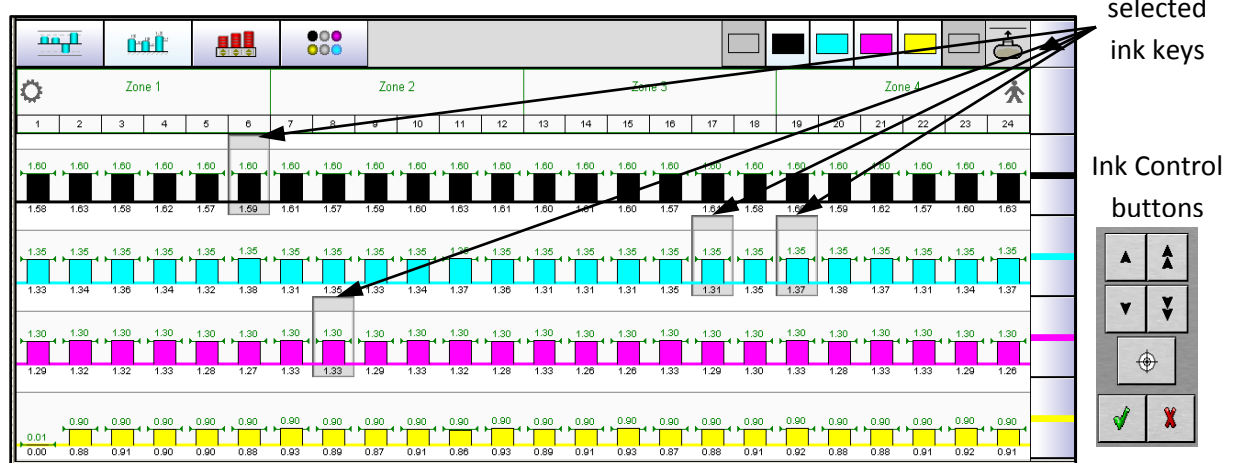
Inker selected

Activated Ink Control buttons

Color Select lines

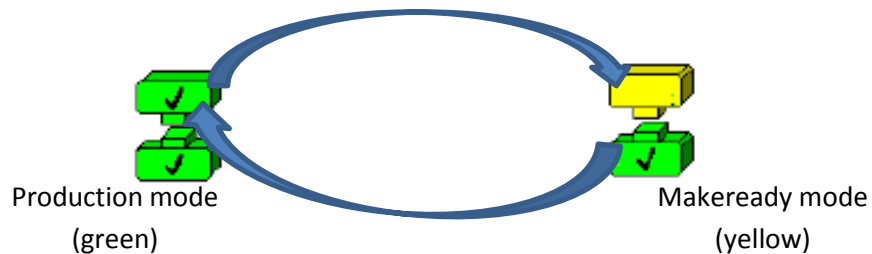
Adjust One or More Ink Keys

Touch the **measured value** for a key to select an individual key. The example below shows four individual keys that have been selected (indicated by the key being enclosed in a gray box).



4.4.2 Switching Between Production and Makeready Modes

You can use the camera toggle buttons on the Web Data view to switch between production and makeready modes.



- Touching a **green camera icon** will switch you to makeready mode.
- Touching a **yellow camera icon** will switch you to production mode.

4.4.3 Turning on Closed Loop Control

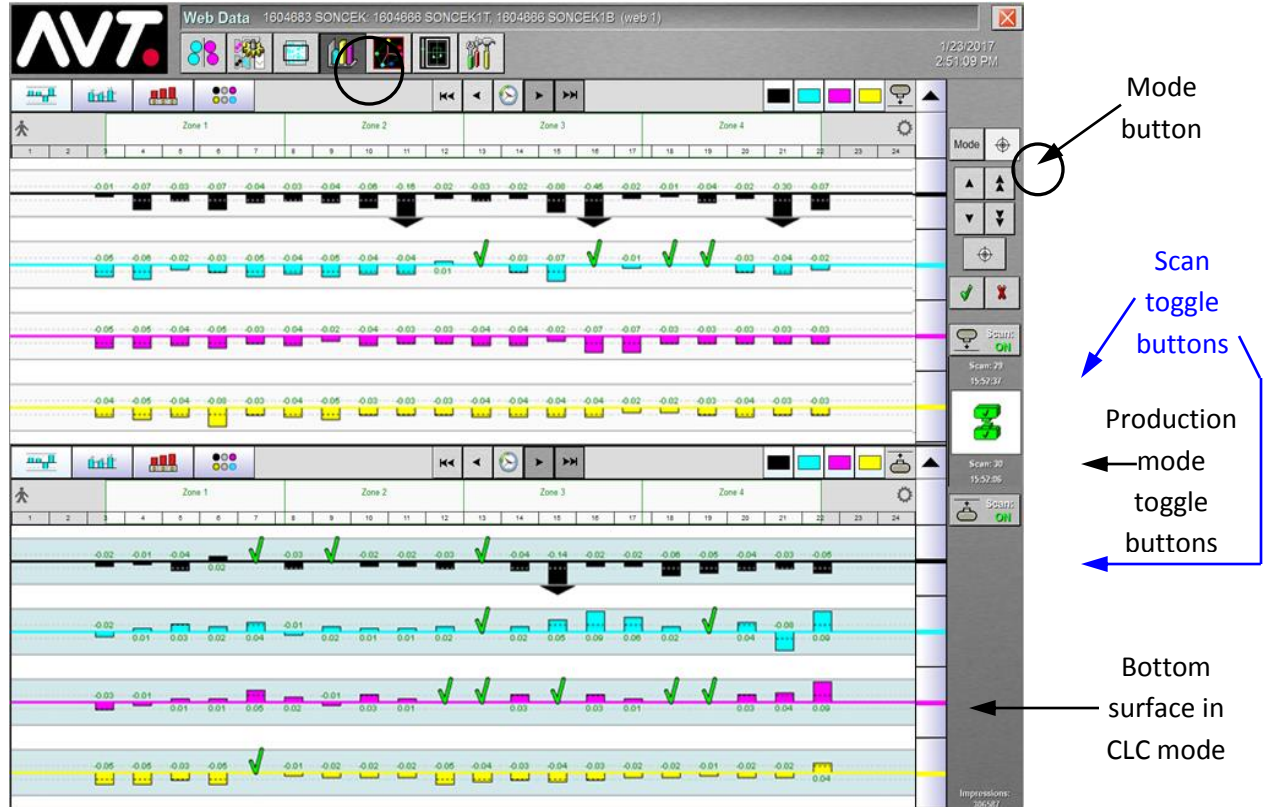
For some OEM interfaces, OEM Closed Loop Control is done from the OEM press console.

For the Microcolor interface, OEM Closed Loop Control is done from the Microcolor II OCU.

4.4.4 Viewing Closed Loop Control from Web Data View

On the Web Data view, you can view CLC mode.

In the following figure you can see the bottom surface is in CLC mode (blue shading), while the top surface is not in CLC mode.



4.4.5 Adjusting Target Densities when Running in CLC

If you need to make target density adjustments while running in CLC, you will need to switch to Key Values mode.

1. Touch the **Mode** button.
2. Touch **Key Values** in the Select Mode drop-down menu.
3. Follow the steps described in [Adjusting Targets on Web Data View](#) to make any needed target density adjustments.

4.4.6 Turning Scanners On/Off when Running in CLC

You can turn the scanners on or off while running in CLC, by touching the **Scan toggle buttons** for the top or bottom web surface.

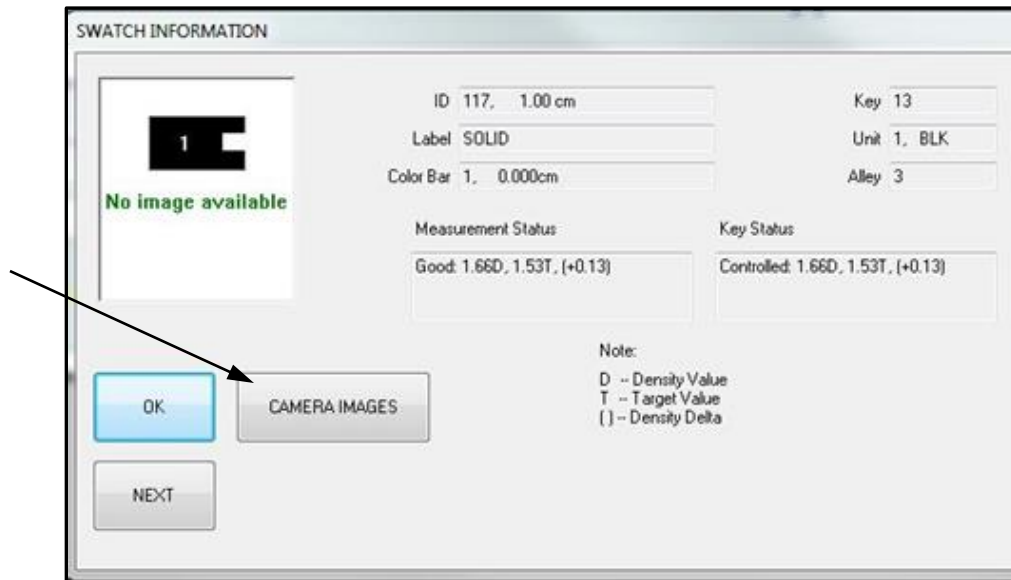
4.4.7 Toggling between Production/Makeready when Running in CLC

You can switch between production and makeready modes while running in CLC, by touching the **camera toggle buttons**.

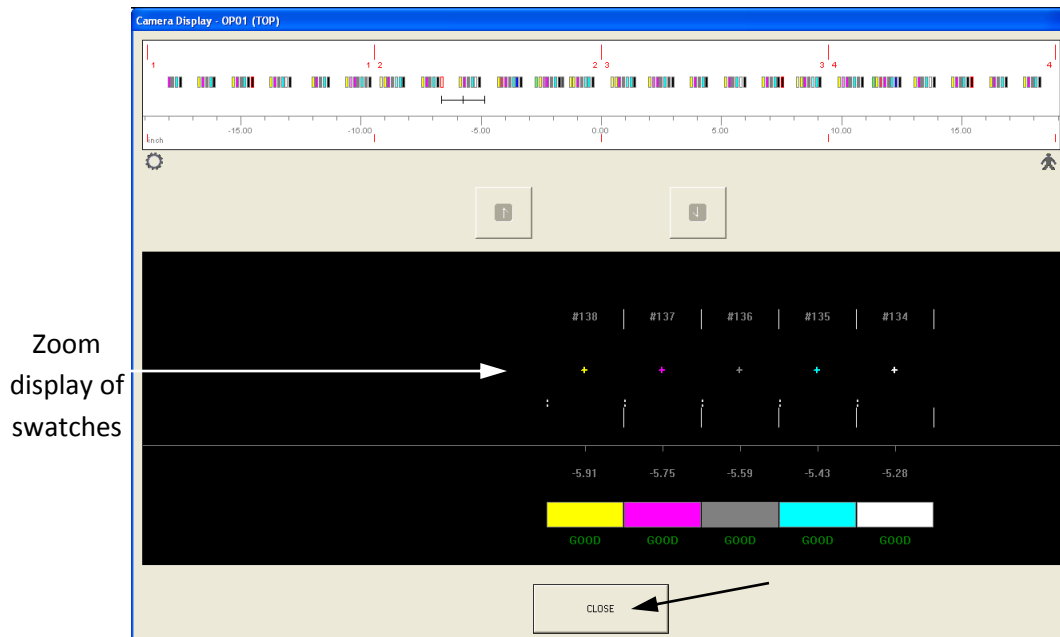
4.4.8 Using Camera View when Running in CLC

If you need to use the camera view while running in CLC, you will need to switch to Display Switch mode.

1. Touch the **Mode** button.
2. Touch **Display Switch** in the Select Mode drop-down menu.
3. Touch the **ink key** you want to view and the Swatch Information screen displays.



4. Touch the **Camera Images** button and the Camera Display dialog displays with the camera view.



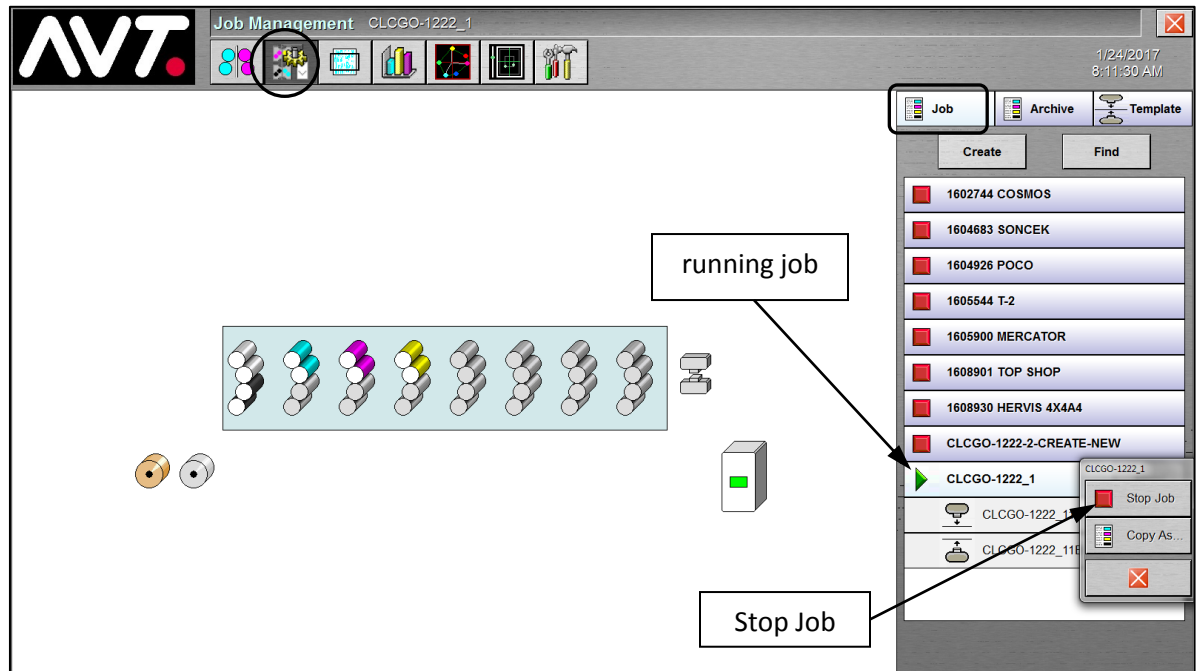
5. Touch **Close** to close the Camera Display dialog and then **OK** to close the Swatch Information dialog.

5 Managing, Archiving, and Troubleshooting a Job



This section introduces the basic elements of using Clarios to stop a job, delete a job, copy a job, archive a job, and troubleshoot a job.

5.1 Stop a Job

You can stop a job that is running from the Job Management view.



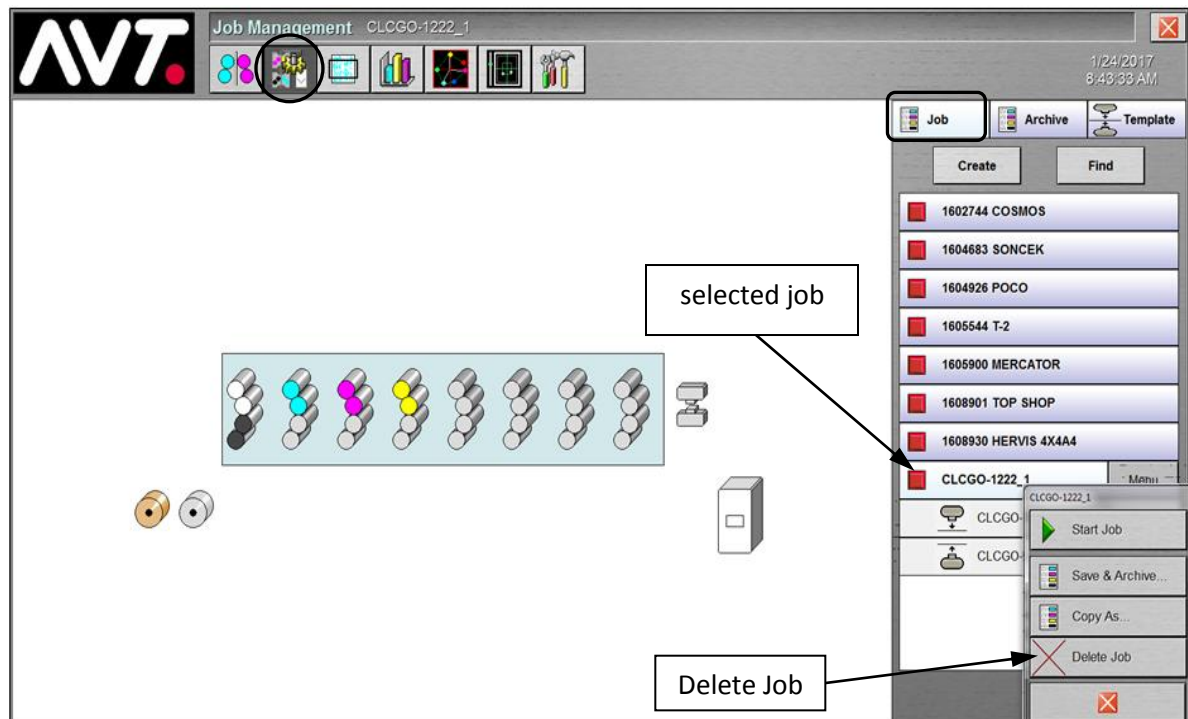
1. Touch a **job** in the job queue to select it and then touch the **Menu** button.
2. Touch **Stop Job**.

The job stops and the icon next to the job changes from  to .

Note: Only one job can be running, so you must stop a job that is running before starting another job.

5.2 Delete a Job

You can delete a job that is not running from the Job Management view.

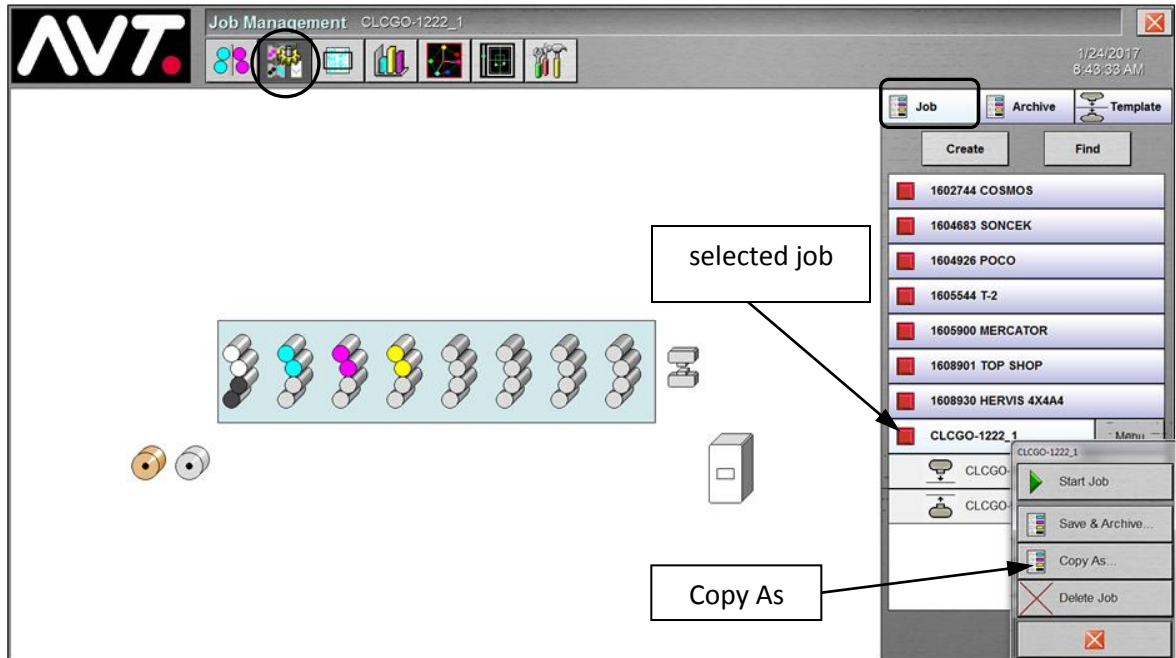



1. Touch a **job** in the job queue to select it and then touch the **Menu** button.
2. Touch **Delete Job**.
3. When the Delete Job dialog displays asking if you want to delete the job, touch **Yes** and the job is deleted from the job queue.

Note: You cannot delete a job that is running.

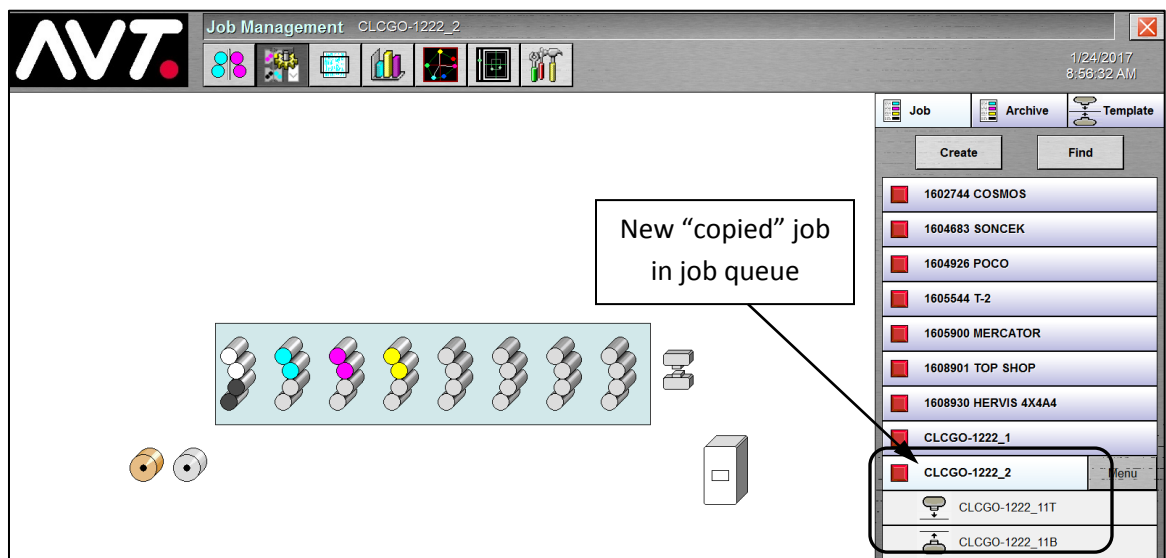
5.3 Copy a Job

You can copy a job from the Job Management view, when you need to copy settings from an existing job to create a new job with a new name.



1. Touch a **job** in the job queue and then touch the **Menu** button.
2. Touch **Copy As**.
3. Enter the **job name** and then touch .

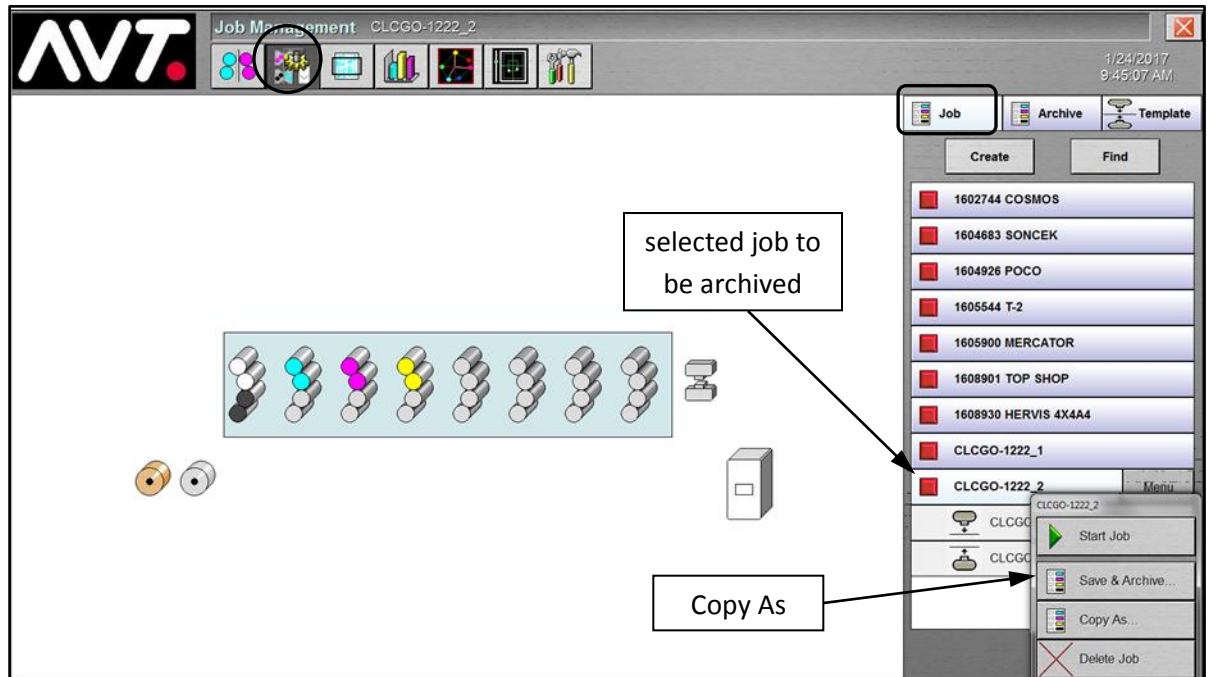
The new job displays in the job queue, with the top and bottom forms opened in the drop-down menu.



5.4 Archive a Job

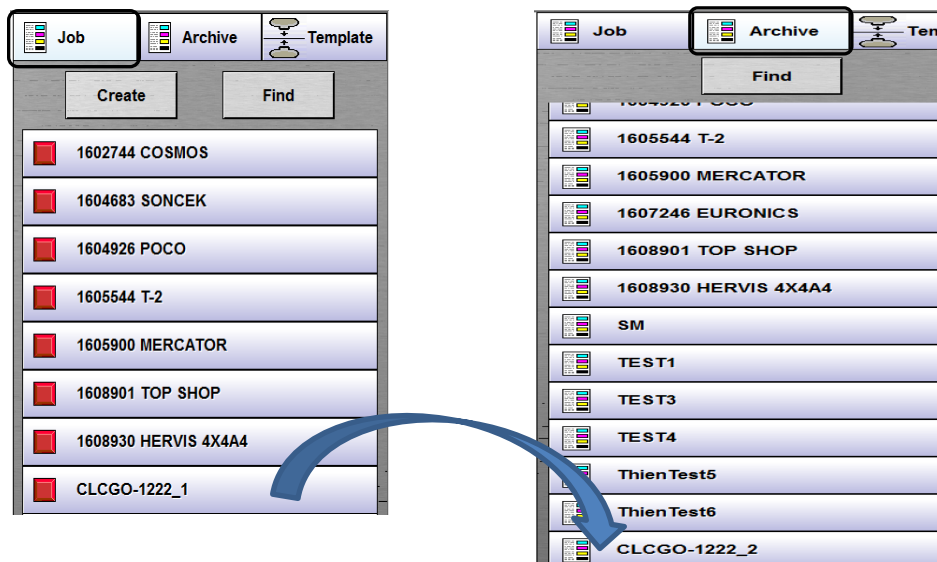
The job queue on the Job Management view only allows up to 45 jobs. When the job queue exceeds the maximum allowed jobs, a message will display telling you to archive some jobs.

1. Touch a **job** in the job queue that you want to archive and then touch the **Menu** button.



2. Touch **Save & Archive**.

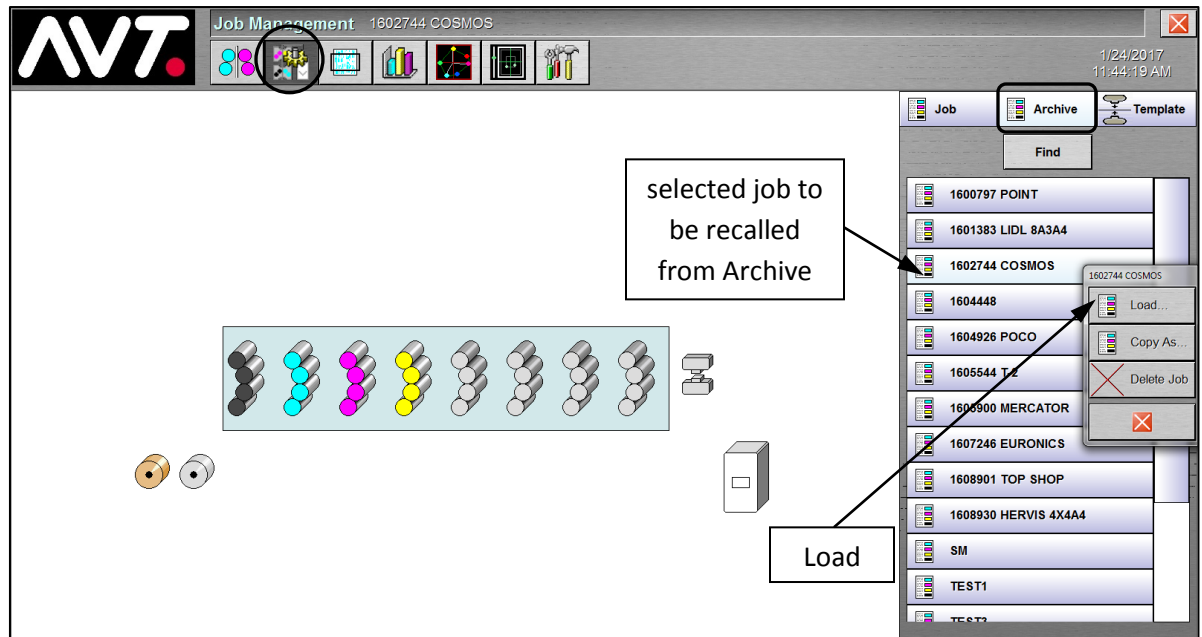
The job (**CLCGO-1222_2**, in this example) is removed from the job queue. When you touch the **Archive** tab, you will see the selected job now in the archive queue.



5.5 Recall a Job from Archive

When you need to reuse a job and job data, you can recall a job from the archive queue.

1. From the **Job Management** view, touch the **Archive** tab, and the list of archived jobs displays in the archive queue.



2. Touch a **job** in the archive queue to select it.
3. Touch **Load** and the job is removed from the archive queue and moved to the active job queue.

5.6 Troubleshoot a Job

You can perform a basic system test to determine where errors are occurring.

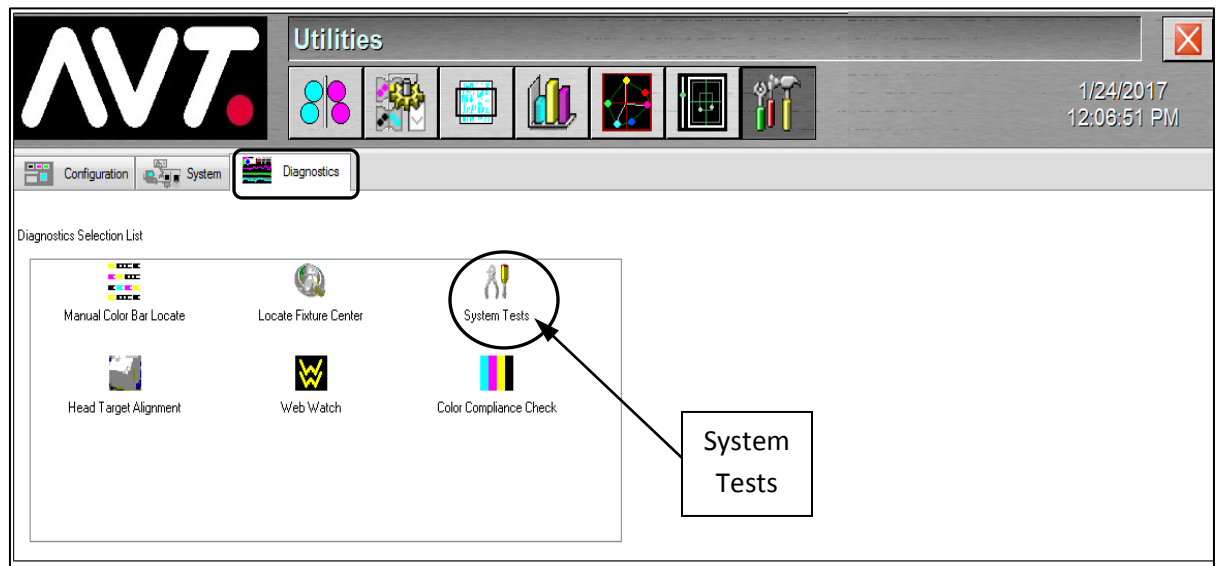
5.6.1 Perform a Basic System Test

If the On-Press scanner is giving incorrect readings, there may be errors in the settings for the servo, camera, or measurement systems.

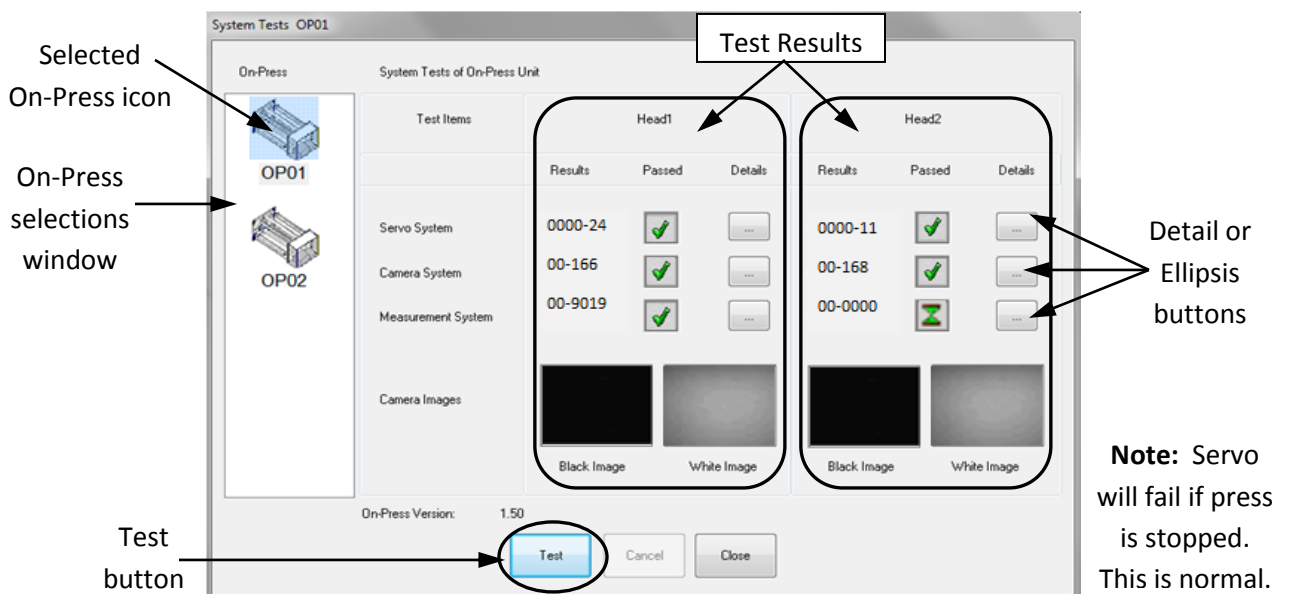
To determine where errors might be occurring, you can run a system test.

Note: Due to limitations of the On-Press, you can select an On-Press unit for testing, but not individual scanners.

1. With the **Utilities** tab selected, touch the **Diagnostics** tab.



2. Touch the **System Tests** icon to display the System Tests dialog.



3. Touch the icon in the **On-Press** selections window for the selected On-Press.

Note: You can select only **one** On-Press unit at a time.

- The **Head1** and **Head2** test results sections display the test items and the results for scanner heads 1 and 2.
 - If the On-Press selected is a one-head unit, the result area for the unused head is blank.
4. Touch the **Test** button to start the tests. A decision dialog displays with the question: “Scanning must be stopped to continue with this operation. Do you want to continue?”.

WARNING: Undertaking this diagnostic will stop Clarios from controlling color on the press.











5. Touch the **Yes** button. A confirmation dialog appears with a warning statement: “Attention - Testing will cause scanner head(s) to move out over web (as long as the press speed is fast enough). Continue?”.
6. Touch the **Yes** button to continue the tests. Clarios automatically tests:
 - servo system
 - camera system
 - measurement system
 - camera images - include black and white images
7. After the tests are done, review the test results. Results display as:
 - **Passed** – Indicated by large green check mark.
 - **Failed** – Indicated by red check mark (only if result error code is 0).
 - **Test Skipped** – Indicated by an empty check box.
 - **Numeric Readings** – Shown in the respective windows.
 - **Details** – Pop-up dialog boxes, system test reports, and show test details.

Note: If any system fails, report it to AVT Customer Service.

5.6.2 Look Up Error Codes for Swatch Errors

While the system is measuring a swatch, you may see a variety of different colored Xs depending on whether the system is in closed or open loop. The color of the “X” indicates the problem found with a particular swatch.

Swatch Errors - System in Closed Loop

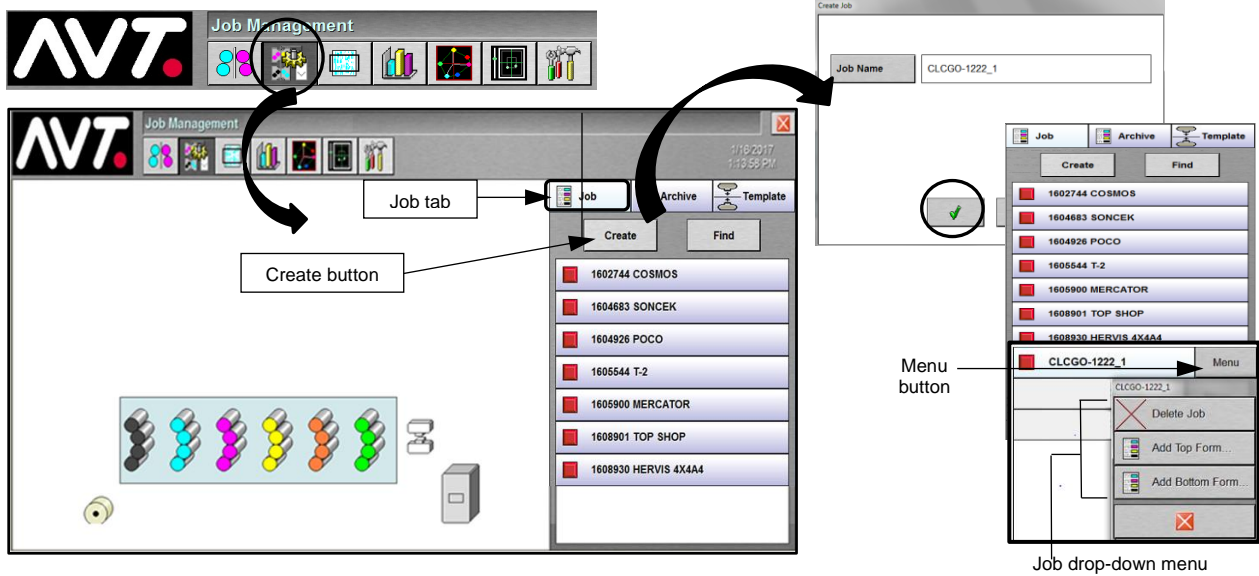
View	Description	Meaning
	No “X” and Delta Bar	Good measurement. Key will be moved.
	Black “X” and no Delta Bar	Bad measurement. Not interpolated. Key will not be moved
	Black “X” and Delta Bar	Bad measurement. Interpolated. Key will be moved.
	Blue “X” and no Delta Bar	User deleted measurement. Not interpolated. Key will not be moved
	Blue “X” and Delta Bar	User deleted measurement. Interpolated. Key will be moved.
	Yellow “X” and no Delta Bar	No measurement. Not interpolated. Key will not be moved.
	Yellow “X” and Delta Bar	No measurement. Interpolated. Key will be moved.
	Gray “X” and no Delta Bar	No measurement for current scan. Key will not be moved.
	Hourglass and Cross-Hatch Delta Bar	Measurement is not current. Exceeds recommended time to past scan. (Default = 5 minutes)
	Hourglass and no Cross-Hatch Delta Bar	Measurement is not current. Exceeds recommended time to past scan. (Default = 5 minutes)

Revision History

Revision Date	Revised By	Version (EO)	Section /Page Numbers	Revision Description
4/5/2010	SW	1.3 (16630)	All	Initial release.
3/6/2017	SW	1.8 (17190)	All	<ul style="list-style-type: none">• Initial release of V1.8.• Converted V1.3 from Frame to Word and updated all screen shots.• Incorporated updates for V1.4 – V1.8.

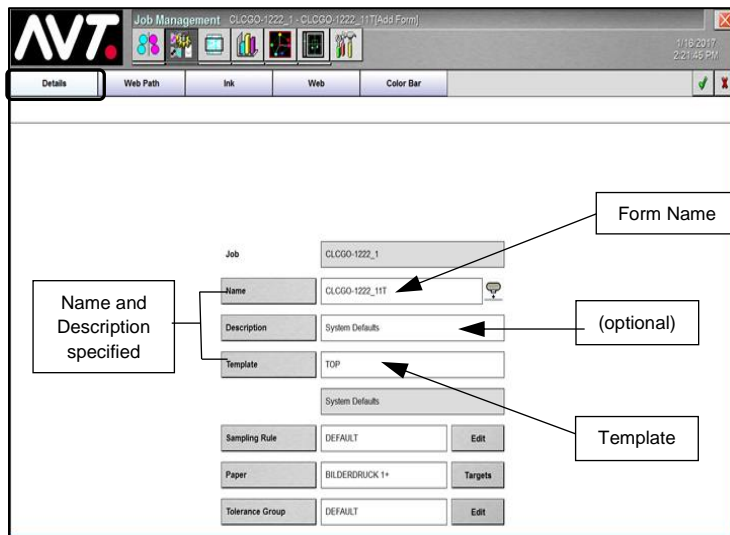
Clarios Quick Reference

Create a Job in Clarios



1. On the Clarios console, touch the **Job Management** button to change to the **Job Management** view.
2. With the **Job** tab selected, touch the **Create** button to create a new job.
3. On the Create Job screen, touch anywhere in the **Job Name** field, enter the name on the keypad, and touch .
4. The new job displays at the bottom of the job queue.
5. Touch the **Menu** button next to the job in the job queue and then touch **Add Top Form** or **Add Bottom Form** from the drop-down menu to set up forms for the job.

Set Up Forms for Job - Detail Form Information



At the **Job Management (Add Form) - Details** view, specify detail form setup information for each surface.

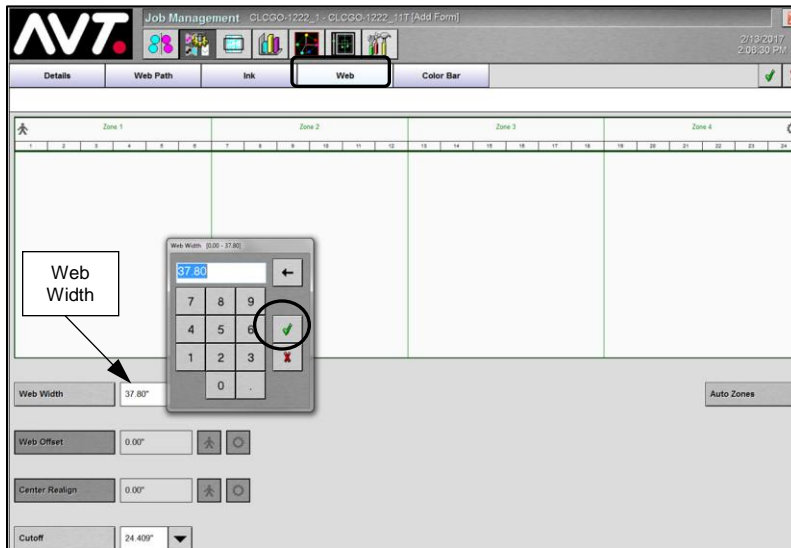
Note: If a default template has been set, all fields are automatically filled in on the Details view.

If a default template has not been set:


1. Touch anywhere in the Name field, enter the name on the keypad, and touch .
2. Touch anywhere in **Template** field, select a template, and touch .
3. Repeat steps for the other surface.

See the *Clarios Training & User's Guide* for details on custom settings.

Set Up Forms for Job - Web Width



At the Job Management (Add Form) - **Web** view, set up the web width.

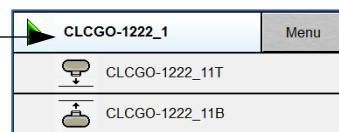
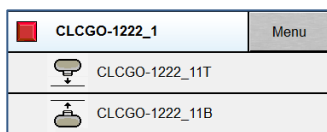
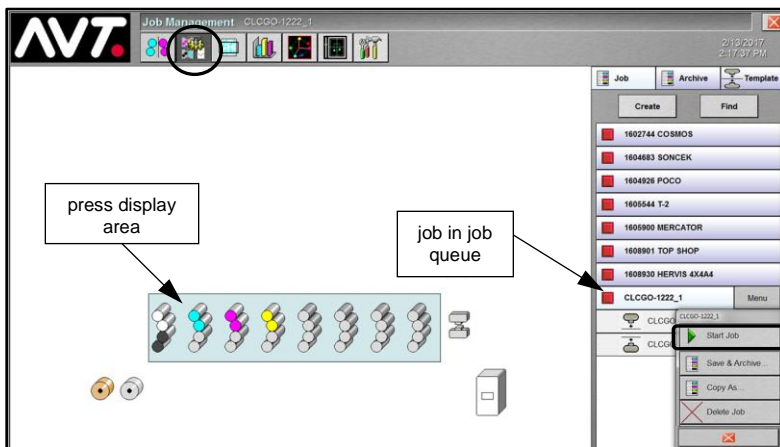
1. Touch anywhere in **Web Width** field, enter image width of the web to be scanned, and touch .

Note: The system automatically sets both surfaces to the same web width.

2. As required, set values for **Web Offset**, **Center Realign**, and **Auto Zones**.



Note: If Web Width is the full width of the web, Web Offset and Center Realign are disabled.

Start Job and Monitor Scan Startup



You start a job and monitor scan startup from the Job Management view.

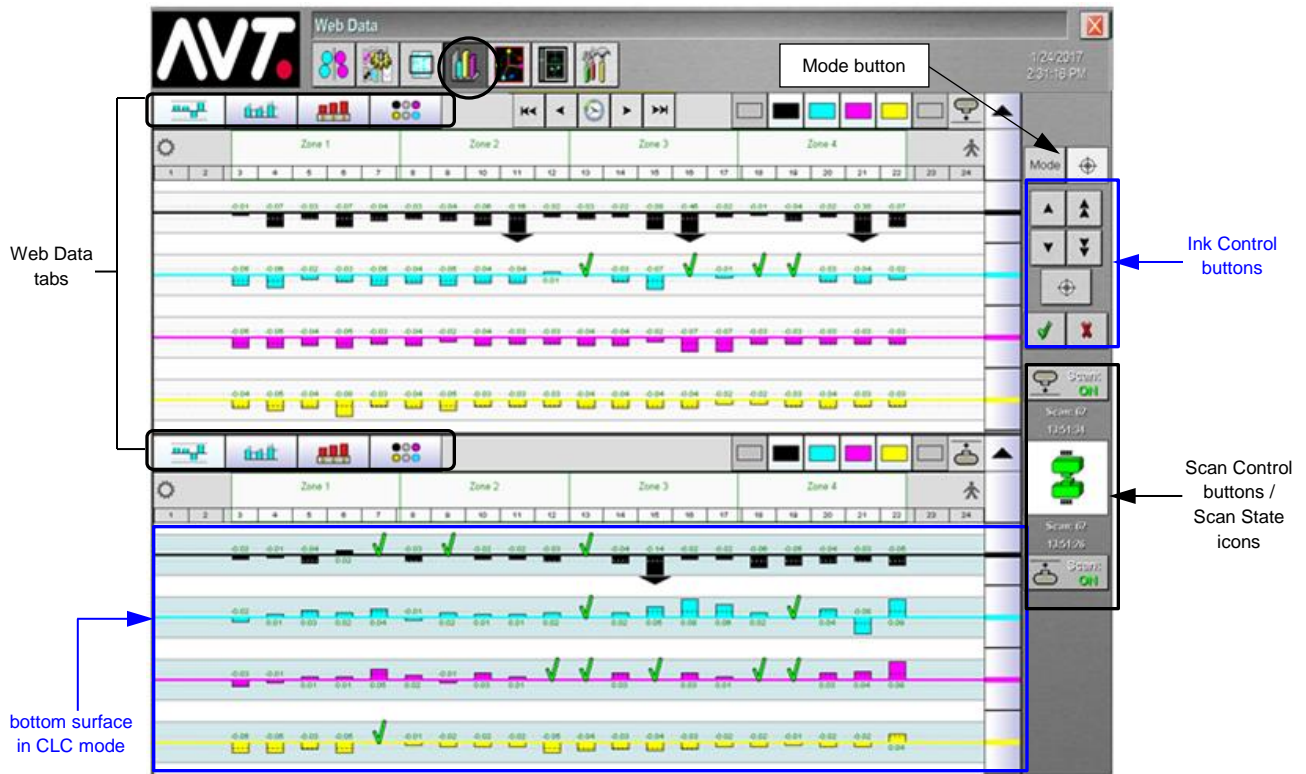
1. Touch the **job** you want to start and then touch the **Menu** button.
2. Touch **Start Job** in drop-down menu.





The icon next to the job changes from  to  when the job starts.








Forms in the job will automatically start scanning. If CLC needs to be enabled, see steps in the section below.

3. Monitor the scan startup in the **press display area**.

View Web Data Results - Delta Density View

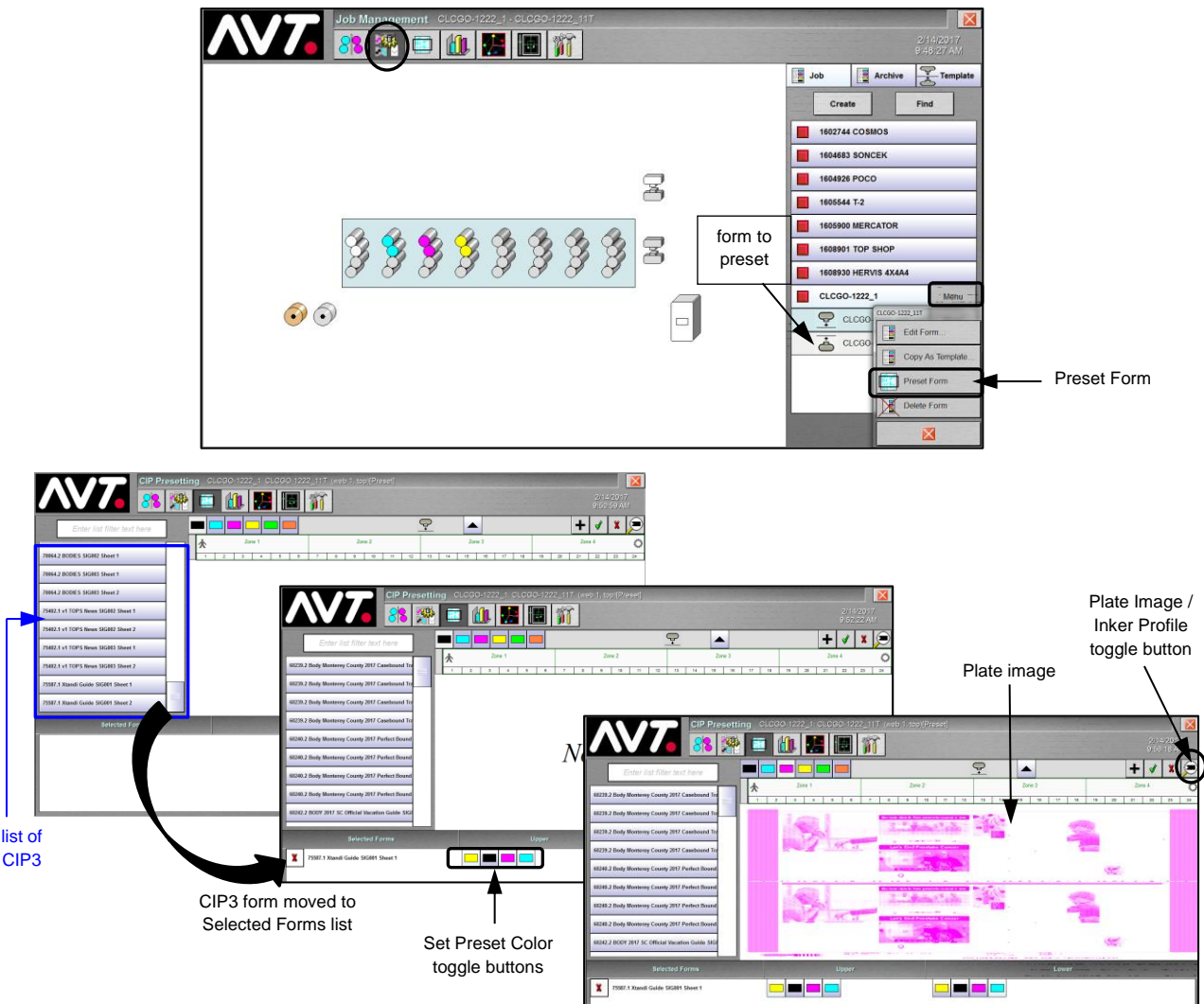


1. Touch **Web Data** button to display Web Data tabs: Delta Density, Scan Data, Key Position, and Tone Value Increase.
 - **Delta Density**  view shows calculated delta density value (scan data value minus target data value).
 - **Scan Data**  view shows actual measured values (target and actual scan value next to each other).
 - **Key Position**  view shows the actual key values from the OEM press or GMI Mercury consoles.
 - **Tone Value Increase**  view shows TVI distribution (dot gain) for CMYKS inkers.
2. Use **Mode** button to switch between Key Values and Display Swatch modes.



Note: Key Values is default. Swatch mode is for troubleshooting. Ink control buttons that display are based on the selected mode. See the *Clarios Training & User's Guide* for more detailed information.
3. In Key Values mode, use the following **Ink Control** buttons to view or change information for individual ink keys, after first selecting a **key, inker, zone, or surface**:
 - Touch the  or  button to add or decrease ink to the target value in small increments (0.01).
 - Touch the  or  button to add or decrease ink to the target value in large increments (0.10).
 - Touch the  button to apply any changes and the  button to undo any change.
 - Touch the  button to open the Set Target Density Values dialog.
4. Touch the **Scan Control** toggle buttons for the top or bottom form to turn scanning on or off.
5. Enable CLC, using either **Zone Correct** button on Microcolor II, the **OEM console**, or Clarios **Mode** button (if the Mercury console is installed). The blue background indicates closed loop control.

See the *Clarios System Standards* document for information on each of the supported OEM systems.

Preset Forms with CIP3 Data (Optional Feature)



After setting up forms for a job and before starting the job, you can preset the forms with CIP3 data.

1. From Job Management view, touch the **form** to preset, then touch **Menu** and **Preset Form** from drop-down menu.
2. On the CIP3 Presetting screen, touch a **CIP3 form** from the list of CIP3 forms.
The CIP3 form moves to the **Selected Forms** list and the Set Preset Color toggle buttons display under the appropriate surface. Initially, no image displays and the toggle buttons are not active.
3. Touch one or more **Set Preset Color** toggle buttons to select colors for presetting form.
You will see the Plate Image display in that color.
4. Touch  to toggle between the Plate Image and Inker Profile views.
5. After specifying all the CIP3 values for the form, touch  to save the CIP3 preset form data.

Contact Information:

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